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ABSTRACT

The document contains 10 papers on assessment in the career development of the handicapped, and is one of three volumes of selected papers presented at a November 1981, international conference on the career development of handicapped individuals. Part I contains four papers presented in a special session on assessment issues, and Part 2 contains six papers selected from other conference sessions on assessment. Papers have the following titles and authors: "Vocational Evaluation: An Evolutionary Trend in the Vocational Assessment of Handicapped Individuals" (J. Nadolsky); "The Vocational Assessment Process: The Vocational Education Perspective" (P. Sitlington); "Career and Vocational Assessment Personnel Development: A Special Education Perspective" (G. Clark); "Vocational Assessment and Personnel Development: A Perspective of the National Association of Vocational Education Special Needs Personnel" (M. Peterson); "An Interest Inventory to Facilitate Student Participation in Career Decisions" (C. Bockhaut and D. Greene-Wilkinson); "Career/Vocational Assessment for the Behaviorally Impaired" (D. Fox); "Career Assessment/Development Project: A Comprehensive Approach to Career and Vocational Programming for the Handicapped Learner" (G. McGrath); "Developmental Career Assessment: A Model for Public Schools" (M. Peterson); "On the Level: Vocational Assessment of the Handicapped in Texas" (W. Quinones et al.); "Employment of a Behaviorally-Based Vocational Assessment Model with Exceptional Individuals" (D. Tesolowski and H. Rosenberg). (DB)

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SELECTED PROCEEDINGS FROM THE INTERNATIONAL CONFERENCE ON THE CAREER DEVELOPMENT OF HANDICAPPED INDIVIDUALS: ASSESSMENT

VOLUME 1

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Presented by The Division on Career Development
The Council for Exceptional Children
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Dallas, Texas

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PREFACE

Career education was first proclaimed as a major educational reform in 1971 when the then U.S. Commissioner of Education, Sidney P. Marland, Jr., introduced the concept to a group of secondary school principals at a national education convention in Houston, Texas. It wasn't long before special educators who were interested in coordinated efforts for exceptional individuals began to apply the concepts of career education to the teaching and training process.

In 1973 The Council for Exceptional Children jointly sponsored with the American Vocational Association a National Topical Conference on Career Education for Exceptional Children and Youth in New Orleans. The conference attracted over a thousand participants several of whom began to plan for the development of a formal organization that would promote career efforts across the country. This organization, The Division on Career Development, The Council for Exceptional Children, became a reality in 1976.

The career movement received another boost when The Council for Exceptional Children sponsored a second National Conference on Career Education for Exceptional Individuals in St. Louis, Missouri, February, 1979. The conference included two days of Training Institutes in addition to three days of presentations, workshops, and keynote speakers. The selected proceedings from the conference are available in: Career Futures for Exceptional Individuals, Charles J. Kokaska, Editor. Reston, Virginia: The Council for Exceptional Children, 1979.

This second national conference provided Division members with the opportunity to increase membership in the organization and expand their efforts toward providing career/vocational programs from the elementary school years to adult independent living situations. By this time, the Division had achieved an adequate financial base and long term planning to publish a newsletter and journal, Career Development for Exceptional Individuals, which would further explore career concepts, research, and programs.

The papers in these three volumes are drawn from the proceedings of the third conference in less than ten years, The International Conference on the Career Development of Handicapped Individuals, Dallas, Texas, November 19-21, 1981. The conference was planned and sponsored by the Division on Career Development, the fledgling group of concerned professionals that began to talk about an organization less than eight years ago. The intent of this third conference was to highlight efforts that were in operation rather than "on the drawing board." This goal was achieved.

The conference plan included 82 sessions which were grouped under the following themes: adult career education, career and vocational assessment, comprehensive career education programming, consumer group involvement, daily living and personal social skills, research, and vocational preparation for gainful employment. Papers which were submitted by the participants were divided for the purpose of publication into three dominant topics: assessment (Volume 1), program implementation (Volume 2), and research (Volume 3).

The Executive Committee of the Division on Career Development, 1981-82, wishes to thank all of the professionals for their work in making the International Conference another successful endeavor. The Division has grown over the past few years because these professionals have seen the need for a career focus to the total life of exceptional individuals and developed the means to facilitate changes in our ideas and programs. We hope that these three volumes of Selected Proceedings will contribute further to efforts on behalf of the career futures of handicapped individuals.

C. J. K.

Long Beach, California

INTRODUCTION

This volume is divided into two parts, issues and selected papers. Part 1 includes papers that were presented in a special session under the auspices of the Interprofessional Task Force on Vocational Assessment. The Task Force is composed of representatives from: a) The Division on Career Development (DCD) of The Council for Exceptional Children; b) The National Association of Vocational Education Special Needs Personnel (NAVESNP) of The American Vocational Association; and c) The Vocational Evaluation and Work Adjustment Association (VEWAA) of The National Rehabilitation Association. Part 2 contains selected papers from other Conference sessions on assessment.

VOCATIONAL EVALUATION: AN EVOLUNTIONARY TREND IN THE VOCATIONAL ASSESSMENT OF HANDICAPPED INDIVIDUALS

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VOCATIONAL EVALUATION: AN EVOLUNTIONARY TREND IN THE VOCATIONAL ASSESSMENT OF HANDICAPPED INDIVIDUALS

Julian M. Nadolsky

Although vocational assessment techniques have been differentially employed by various cultures throughout recorded history, the full scale development and systematic application of these techniques is a twentieth century phenomenon. Vocational assessment services have become essential to the systematic development and satisfactory maintenance of a complex industrialized society - - a society that contains an abundance of diverse occupations, the majority of which are performed by employees, rather than by individuals who are self-employed. For example, there was little need for formal programs of vocational assessment in the United States until it became an employee society. It was not until the United States evolved from an agricultural to a manufacturing society that work became an activity that was separate from other activities in the life of an individual. As long as our society maintained an agricultural orientation, most citizens performed work in settings that were adjacent to, and integrated with, other family activities. But with the development of a manufacturing society, work became an activity to be performed by employees in settings that were separate from the family environment.

By its very nature, manufacturing required a separation of working from living. Since the work of manufacturing was performed in a separate work place (a place that was intended only for the performance of work), the conditions developed which made it possible to undertake an organized, systematic study of work. The first serious attempts to study work in our society focused upon *work* itself, and not on the *worker* or *working*. These investigations began in the early 1900's and placed emphasis on studying more efficient means of structuring the work to be performed in order to increase productivity. Throughout this process of analyzing the details of work, the worker was ignored as a person and viewed as a mechanical or machine-like part of the work process. In order to function as a mechanical part of the work process, it was necessary for the employee (who was already required to separate work life from family life) to undergo a further *subject-object* split. The *subjective* or human components of the employee's internal life had to be maintained separate from the *objective* or mechanical responses that he or she was required to display as an external part of the work process. In essence, the objective activities to be performed (i.e., work) were emphasized and separated from the subjective needs and desires of the individual (i.e., worker) who was to perform them.

The initial approach to vocational assessment in our society followed a similar pattern, which also entailed a split between subject and object. Whereas the analysis of work focused on the *objective* activities to be performed, vocational assessment placed emphasis on analyzing the *subjective* characteristics (i.e., aptitude, interest, personality factors, and related characteristics) that a potential worker possessed. The internal or subjective characteristics of potential workers were analyzed through the use of objective measuring devices which were applied in settings that were separate from where the work was to be performed. These objective measuring devices were abstract in nature and their content was unrelated to specific activities that potential workers would be required to perform on the job. Thus, vocational assessment concerned itself with studying the potential worker (subject) in total isolation from the setting and tasks associated with the actual work (object) that was to be performed.

The vocational assessment movement, as it emerged within our manufacturing society, was designed to meet the demands of industry, moreso than the needs of individuals. By relying on the results of vocational assessment, industry could select those individuals who possessed an abundance of talent and who, therefore, had a greater probability of being able to perform industrial jobs. Those individuals who scored at the lower extreme on the objective measuring devices were not selected for industrial jobs. In many instances it was felt that these individuals did not possess sufficient capacity to render them capable of engaging in competitive employment. By applying this isolated, objective, and capacity-based approach to vocational assessment, the majority of disabled individuals had a low probability of being considered capable of working in industry, even though their actual capability or potentiality for working on industrial jobs was never really determined or given consideration. Thus, the initial approach to vocational assessment in our society placed emphasis on probability, rather than potentiality.

Due to the limitations that traditional vocational assessment procedures imposed upon disabled individuals, vocational rehabilitation could not achieve its primary objective (i.e., the preparation of disabled individuals for gainful employment) by relying on a science of probability in evaluating the disabled for work. For this reason, vocational rehabilitation sought and encouraged the development of vocational assessment programs that were individually oriented and concerned with assisting the individual in determining his or her own potential for work. A change in emphasis from probability to potentiality was required to meet the vocational assessment needs of the disabled. In order to accurately determine the vocational potential of disabled individuals it was necessary to assess the individual-in-relation to the work that was to be performed, rather than in isolation from that work.

With the encouragement and support of vocational rehabilitation, vocational evaluation emerged as an individually-oriented trend in vocational assessment at about the time that our society began to change its emphasis from manufacturing to service. Rather than totally relying on standardized and objective measuring devices, vocational evaluation offered a service that emphasized the use of practical techniques and procedures which were derived from and incorporated the realities of work into their format. Throughout the vocational evaluation process, emphasis was placed on confronting individuals with their internal assets and limitations (i.e., subjective elements) in relation to the external requirements (i.e., objective demands) of work tasks.

Due to the practical, experiential nature of most vocational evaluation techniques, the individual is required to integrate subject (i.e., worker characteristics) with object (i.e., work demands) in order to perform the task at hand. In doing so, the individual experiences his or her own potential for working within various occupational areas that exist in our society. Thus, it is the experiential component that provides the rationale for vocational evaluation and "sets it apart" from traditional programs of vocational assessment. The experiential component of the vocational evaluation process enables individuals who are disabled or who have special vocational needs and problems to engage in physical learning and intuitive decision-making.

The Vocational Assessment Process:

The Vocational Education Perspective

Patricia L. Sitlington

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The Vocational Assessment Process:
The Vocational Education Perspective

My charge this afternoon is to discuss the vocational assessment process with you from the perspective of the discipline of vocational education. I am approaching this topic from a position in which I do not often place myself--speaking about an area in which I have little direct experience. My teaching experience is as a special educator working in the vocational area--not as a vocational education teacher. In the past few years, however, I have worked extensively with vocational educators at the preservice and inservice level and will be basing my comments today on the work and discussions I have had with these professionals. In my presentation I will be attempting to present the perspective of vocational education in the public schools at the secondary and post-secondary level.

Settings in Which Vocational Educators Function

In order to understand the information needs of vocational educators we must understand the type of settings in which they function and in which they will encounter the special needs learner: (a) vocational education classroom and/or laboratory; (b) isolated vocational classroom and/or laboratory; (c) vocational education cooperative education program; and (d) isolated cooperative education program.

Note. The contents for a major part of this presentation is taken from Sitlington, P.L. Vocational assessment and the individualized vocational plan. Journal of Vocational Education Special Needs Personnel, 1981, 3 (3), 27-29; 32.

Personnel working with students in the vocational classroom and/or laboratory are providing basic instruction in their vocational area, such as quantity food preparation, auto mechanics, or building trades, and often also working with students in a simulated or in-school experience setting, such as the vocational school cafeteria, auto mechanics laboratory, or the building trades model home. The vocational education teacher may be working with the special needs learner in the regular vocational education program or in an isolated program designed specifically for the special needs student.

The teacher working with the special needs student in a regular or isolated cooperative education program is providing basic instruction in his/her vocational area and then placing and supervising the student in a job out in the community, such as dental assistant, sales clerk in a department store, and cashier in a cafeteria. The cooperative education model has been used extensively with the special needs learner, particularly the mentally retarded, for many years and is often called a work-study or work experience program.

Finally, the vocational educator may work in either of these program models in either a separate career/vocational center or as part of a comprehensive school in which vocational and liberal arts education programs are offered side by side.

Information Needs of Vocational Education Teachers

Regardless of the model and setting in which vocational educators work, their main concern is with preparation for their specific vocational area, not with awareness and exploration activities. Although they are concerned *with the student as a whole, this concern is necessarily narrower than that of the special education or vocational rehabilitation professional, because the focus of their training goal is more narrow. Many of the information needs of the vocational educator are also the same concerns of any regular educator involved in instruction.*

Before any of this information is collected, however, the vocational education professional has an even more primary concern--"Does the student belong in my program?" At this point the teacher is concerned that the student is interested in the specific vocational area and that the special needs learner has the projected ability to complete all or an identified segment of the training program.

Once this initial information is collected, the next question asked is "How do I work with this student?" The information needed at this point falls into three main areas: (a) entering knowledge and performance levels in the specific vocational area; (b) the best methods for working with the student; and (c) the student's ongoing knowledge and performance levels related to the vocational area. Specifically, in terms of entering knowledge and performance levels the vocational educator needs to know such information as: the general reading and math skills of the student; the student's basic work habits and attitudes; how well the student can handle the necessary tools and equipment; and the student's knowledge or prerequisite terms related to the vocational area.

In the area of best methods to be used, the vocational teacher needs to know whether the student learns more effectively through demonstration, *reading, listening, and/or seeing the material. The teacher also needs to ascertain the best methods to use in managing the student's behavior. Finally, in the area of ongoing knowledge and performance, the teacher needs to collect information on whether the student is learning the basic skills in the vocational area and whether he/she has developed the necessary work habits and attitudes to acquire and maintain employment in the area.*

Suggested Vocational Assessment Process

Figure 1 presents a model for an assessment process which I feel would be most effective in providing the information needed by the vocational education teacher in working with the special needs learner. This process is closely tied to the development, implementation, and monitoring of the student's Individualized Education (Vocational) Plan and contains three basic assessment phases: (a) initial assessment; (b) entering assessment; and (c) continuous assessment. The first phase, initial assessment, would usually be done by professionals specifically trained in the area of vocational programming for the special needs learner and would probably most closely resemble the assessment advocated by special education. Information gathered during this phase would include the following: (a) the specific vocational training area in which the student is interested and a very general estimate of whether the student could function successfully in that area, including work samples and actual trial periods in specific vocational areas; (b) the general reading and math skills of the student; (c) work habits and attitudes; and (d) the best methods of working with the student.

The second phase of the process, entering assessment, would be conducted by the vocational educator and would yield information on the specific knowledge and performance levels of the student related to the identified vocational training area. The final phase would actually be an ongoing one and would also be conducted by the vocational education teacher. Information collected here would again be related to knowledge and performance levels in the specific vocational area, but would involve monitoring the student's acquisition of these skills as well as an exiting assessment of whether the student is ready to enter competitive employment. Work habits and attitudes as they are exhibited on the job would also be monitored.

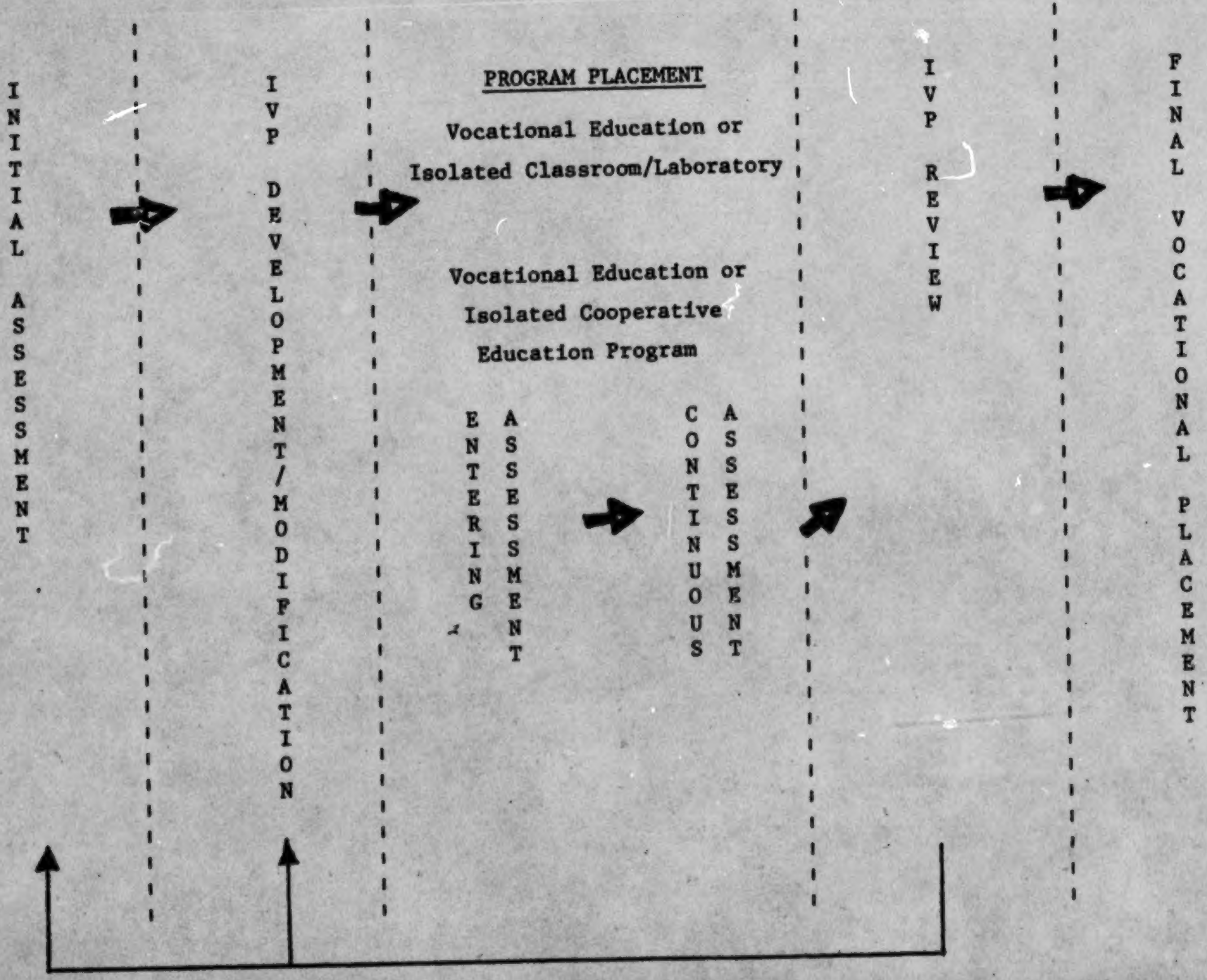
Hopefully all three phases of the assessment process would be very performance oriented with a minimum amount of information collected by standard paper and pencil tests. If implemented correctly this model allows for the full involvement of the vocational education teacher and relevant and action-oriented assessment of the special needs learner in a vocational area of primary interest to him/her. It also makes maximum use of the expertise of special education and vocational education professionals--special education in the area of learning and teaching strategies and work habits and attitudes, and vocational education in the specific knowledge and performance content of their vocational area.

References

Sitlington, P.L. Vocational assessment and the individualized plan. Journal of Vocational Education Special Needs Personnel, 1981, 3 (3), 27-29; 32.

Figure 1*

Vocational Assessment and the Individualized Vocational Plan


INITIAL ASSESSMENT
IVP DEVELOPMENT/MODIFICATION
PROGRAM PLACEMENT
Vocational Education or Isolated Classroom/Laboratory
Vocational Education or Isolated Cooperative Education Program
ENTERING ASSESSMENT
CONTINUOUS ASSESSMENT
IVP REVIEW
FINAL VOCATIONAL PLACEMENT

*Note. Taken from Sitlington(1981).

Career and Vocational Assessment Personnel Development - A Special Education Perspective

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Career and Vocational Assessment Personnel
Development - A Special Education Perspective

Issues in personnel development for roles in career and vocational assessment are rapidly emerging as the vocational assessment process is being moved from community rehabilitation settings to the public school. For years, schools have chosen to ignore this aspect of assessment or else seek information from private or public resources claiming expertise in the area. The mandate for appropriate, nondiscriminatory assessment in developing individual education plans in special education now parallels the assessment requirements in rehabilitation for an individual work and rehabilitation plan. This mandate sets the stage for dealing with a number of questions, such as:

1. Who should conduct career and vocational assessment for the school?
2. What should their training include?
3. Should career and vocational assessment team members have a special license or certificate for this role?
4. Should "outsiders" on the special education team have assessment training in order to participate in the process and/or use assessment results?
5. To what extent should special education programs depend upon vocational evaluators in community agencies for career and vocational assessment?

While there are other important questions, these five will be the focus of this presentation. The responses proposed are admittedly personal and are not based on any empirical data base. They are based on nearly 20 years of experience, direct and indirect, with career and vocational assessment and nearly 15 years of personnel preparation in career development for the handicapped.

Question 1: Who should conduct career and vocational assessment for the school?

Response: All special education personnel in the schools should participate in acquiring assessment information. Regular education personnel such as the school nurse, school psychologist, school social worker, and teachers can also be a source of informal and, in some cases, formal data. Outside of school personnel may include physicians, human service agency personnel, employers, and parents or guardians. A career and vocational assessment specialist may be desirable in programs where specialization is practiced among special education personnel. Certainly, vocational evaluators in the community or the region can contribute considerably to vocational/occupational questions being asked. In each instance, the specific nature of the assessment dictates who can best collect and/or interpret the results.

Question 2: What training should be required of those who participate in the assessment process?

Response: The kind and amount of training needed for adequate participation in the assessment process varies and is limited by many realities in public schools. The bare minimum for any professional educator should involve a thorough understanding of the functions and limitations of psychoeducational measurement. Secondary special education personnel however, could benefit from a more specific knowledge and vocational assessment approaches and existing assessment alternatives. The specialist in career and vocational assessment, if one can be afforded, should have knowledge and skill beyond the level of the general secondary special educator to include comprehensive training in career and vocational assessment techniques. Training can be preservice or inservice for any of the above professionals, but should be planned and conducted by persons who are thoroughly familiar with the career development assessment needs of in-school youth.

Question 3: Should career and vocational assessment team members have a special license or certificate for this role?

Response: Only a specialist in career and vocational assessment should be required to be certified or licensed. This is proposed primarily for school personnel, but the principle also applies to private or public agency personnel in the community who conduct vocational evaluation. The current state of the art demands some rigorous standards for people in such critical roles.

Question 4: Should "outsiders" on the special education team have assessment training in order to participate in the process and/or use of assessment results?

Response: Outsiders, in this context, are those individuals referred to in question one who are not a part of the secondary special education staff. That is, regular education teachers and school support personnel, community professionals, employers, and parents or guardians. Obviously, the range of knowledge of career and vocational assessment in this group defies a simple generalization. It seems safe to state, however, that the specific mission of the public school in training for career and vocational development is so poorly understood that some training or orientation is needed to provide non-special educators with a perspective for participation and/or use of assessment results. Formal training for any participant in this group is not realistic in most cases. One exception would be when a school district engages an agency or individual to provide ongoing assessment services for students in that district. In this situation the contracted agency or individuals should provide evidence of an awareness of current philosophies or practices of secondary special education career development programs or be willing to acquire such an awareness through training.

Question 5: To what extent should special education programs depend upon vocational evaluators in community agencies for career and vocational assessment?

Reponse: To a great extent, the answer to this question depends upon the degree of commitment of the special education program to career and vocational assessment. If, indeed, the program staff sees a unique difference between life career assessment and vocational assessment or vocational evaluation, then use of public or private agency vocational evaluators would be tempered by the knowledge of exactly what type of assessment such professionals intend to provide. There is no doubt that the sophistication level of vocational evaluators trained from a vocational rehabilitation perspective will provide a school program with unique assessment data in occupational/vocational readiness, aptitude, and potential. They may or may not provide as much information as the program needs in other career development areas, e.g., personal-social skills and daily living skills. For this reason, complete dependence on vocational evaluators from outside the school system may be questionable.

To a lesser degree, another factor enters in. That is the difference of population characteristics between special education programs and vocational evaluation and work adjustment programs. Application of established techniques and procedures with adults with physical and/or mental disabilities to young or immature adolescents with disabilities is not always adequate. The degree to which a special education program would look to vocational evaluators for assessment services would also depend on their willingness to adopt procedures to a younger age group whose immediate goals are more frequently related to training than to employment placement.

Assumptions Underlying Responses

The responses provided for the five questions did not come out of a vacuum. Rather, they came from a few assumptions that have developed from some observations that provide both an elaboration and a summary for the responses. The observations are loosely patterned after those suggested by Meyen (1980) on general personnel development issues in special education.

Observation 1: The conditions that characterize assessment settings should set the parameters for standards in personnel development.

The current conditions in public school career and vocational assessment are characterized by uncertainty, lack of philosophical or theoretical bases, unsophisticated personnel, and instruments and procedures of questionable validity and reliability. The standards for personnel development should be extremely rigorous, then, to counteract the lack of rigor in the field. This is not a time to permit anything in the name of assessment.

Observation 2: Career assessment and vocational assessment, while related, are not synonymous and raise new issues of concern for personnel development.

Career assessment includes, if one follows the models proposed by Brolin & Kokaska (1979) and Clark (1979), includes assessment in areas of values, attitudes, human relationships, daily living, and occupational/vocational performance. These also are advocated for young children as well as youth, adolescents, and adults. This is in contrast to the purposes of vocational assessment and evaluation which are specifically related to working age adolescents and adults in occupational or vocational interests, aptitudes, and performance. Training personnel for either or both roles has obvious implications.

Observation 3: Our current lack of powerful assessment procedures may be a consequence of our history of being primarily concerned with identification and placement practices at the expense of assessment for behavior change.

It is clear that our assessment concerns with special needs students in schools have only indirectly related to instruction, training, counseling, or behavior change. Professional acknowledgement should be made that assessment for longterm prediction, regulatory compliance, or simple placement decisions is nonproductive, expensive, and possibly discriminatory.

Observation 4: Career and vocational assessment procedures have varying degrees of relevance and effectiveness relative to degree of handicapping conditions and age of individuals being assessed.

Issues in instrumentation, normative assessment results interpretations, discriminatory administration practices, and interpretation and administrative skills with the difficult-to-test and young adolescent are critical and have a great deal of significance for persons responsible for assessment and their training.

Observation 5: Certification standards tend to dictate personnel development programs.

Standards for personnel competence are meant to be a measuring unit against which a personnel training program can be evaluated. Too frequently they are interpreted as a blueprint for the training itself. This is not to say that personnel preparation programs should not use the standards as goal components. It is important, however, not to be restricted in the creative process of training by rigid interpretations of what the person must have experienced.

The recommendation for a formal certification process for specialists in career and vocational assessment in public schools that appeared above (Question 3) is one that requires cautious implementation by any personnel preparation program. Biases of disciplines must be worked out and the objectives of a quality career and vocational assessment program be kept as the focus.

Conclusion

It is discouraging to note that even with federal regulations mandating states to train special education personnel appropriately, there is little available in the literature that attempts to relate personnel preparation and career and vocational assessment. There are fewer than five college or university programs that comprehensively address the need of preparing special/ vocational educators in the area of career and vocational assessment. What programs do exist have provided no evaluation of their effectiveness. This leaves the field without a data base for planning and somewhat dependent on other disciplines.

While some aspects of school-based assessment are unique in the areas of career and vocational development, the fields of rehabilitation, work evaluation and work adjustment have a longer history with these issues and have much to offer. It is hoped that issues and questions can be resolved together to provide special needs students in school an assessment program to effect change and development for their current and future career and vocational needs.

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Vocational Assessment and Personnel Development: A Perspective of the National Association of Vocational Education-Special Needs Personnel (NAVESNP)

by

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Vocational Assessment and Personnel Development: NAVESNP Perspective

Vocational educators are concerned that students with special needs receive effective vocational assessment so that appropriate recommendations for entrance into vocational classes, teaching techniques, and curriculum modifications are provided. Vocational assessment is usually seen most effective when implemented a year before entrance into vocational classes (usually 9th or 10th grade.) Vocational assessment should be implemented as a team process in which: (1) a trained vocational evaluator coordinates the assessment process, administers certain tests, and facilitates interpretation of assessment results; and (2) a variety of educators-special education and vocational education teachers, counselors, etc. -provide input concerning student abilities and use the results of vocational assessment in developing appropriate Individualized Education Plans (IEP's).

If vocational assessment is to be effective, however, vocational evaluation specialists and the other assessment team members must be adequately trained. This short paper provides NAVESNP perspectives on personnel development related to vocational assessment. These comments are based on several sources which include: (1) a survey of NAVESNP members: (2) a national survey of vocational special needs coordinators in state departments of education; (3) development by a 20 member NAVESNP Committee (NAVESNP Committee, 1981).

Personnel development will be discussed as it relates to (1) vocational evaluation specialists and (2) assessment team members.

VOCATIONAL EVALUATION SPECIALISTS IN SCHOOLS

Presently there are relatively few vocational evaluation specialists working in schools. However, their members are increasing as public schools attempt to provide vocational assessment (Peterson, 1981)

Competencies Needed.

In recent years, increasing numbers of vocational evaluators have been employed in rehabilitation and manpower programs. Based on these programs competency studies (Coffey, 1978) have been initiated. Noll (1978) surveyed vocational evaluators in schools and found them to perform similar tasks as evaluators in rehabilitation facilities. However, no comprehensive competency study of vocational evaluators in school has been conducted.

However, NAVESNP members have expressed opinions that additional or different knowledges and comptencies are needed. These would appear to include:

- knowledge of vocational education programs, laws, and vocabulary
- understanding of special education programs, policies, and procedures
- understanding of developmental psychology and the needs of adolescent special needs students
- ability to develop work samples based on vocational programs

- ability to recommend curriculum modifications and teaching techniques in vocational programs
- ability to coordinate and develop methods by which teachers, counselors, etc., can provide input into the vocational assessment
- ability to assess pre-vocational and independent living skills
- a familiarity with tools and techniques of the skilled trades

Background

Vocational evaluation specialists may come from a variety of backgrounds including: rehabilitation vocational evaluators, vocational teachers, counselors, special education teachers, etc. Depending upon the experience of each individual, varied types and degrees of additional training may be needed. Vocational educators are especially concerned that vocational evaluators have work experience in business and industry and have a solid understanding of the requirements of employees, outside education. This is needed if good vocational recommendations are to be made. Of concern is the fact that many persons graduating from graduate programs in vocational evaluation do not have prior work experience, have little understanding of hands-on-work, and consequently may have difficulty in relating to vocational education teachers, and may rely too heavily on the use of commercial vocational evaluation systems.

Certification.

A separate certification of vocational evaluation specialists should be developed through the State Department of Education in each state. Such a certification may take the form of an extra endorsement to be applied to existing certifications, or may be identified as a totally separate certification. Certification requirements should include; (1) professional certification as a vocational evaluation specialist by the Commission on Certification of Work Adjustment and Vocational Evaluation Specialists (CCWAVES); (2) a graduate introductory course in special education and vocational education; and (3) graduate course work (6-12 hours) in vocational evaluation/assessment. Teacher certification should not be required as a pre-requisite to certification as a vocational evaluator in schools.

Professional certification.

The Commission on Certification of Work Adjustment and Vocational Evaluation Specialists (CCWAVES) was recently formed and is initiating a professional certification process. Vocational evaluators in schools should be certified by this Commission and state certification should be partially based on it.

While vocational evaluators in schools support the CCWAVES certification process, many are concerned that the Commission may focus too heavily on knowledges and skills needed to function effectively in rehabilitation to the exclusion of skills needed in schools.

Training.

Training of vocational evaluation specialists should be provided by universities-primarily via graduate level courses. Presently, eleven graduate programs in rehabilitation offer specialization emphasis in vocational evaluation; an undetermined number of universities offer vocational-special needs graduate courses in vocational evaluation. University departments of vocational education, special education, counselor education, and rehabilitation should offer interdisciplinary graduate programs in vocational assessment. The recently developed program at North Texas State University provides a prototype for such an interdisciplinary effort. (North Texas State University, 1981). Types of courses identified with each department might include:

Special Education:	.Introductory course in special education (state and national laws, policies, and programs)
Vocational Education	.History and principles of vocational education .Industrial arts course(s) .Vocational Education for handicapped students .Occupational information .Occupational analysis
Rehabilitation	. Medical and psychiatric aspects of disability . Rehabilitation facilities

Courses in Vocational Evaluation might be taught in any department, but should include skills in the following areas that may not be covered in courses listed above:

- .vocational aptitude, interest, and career awareness tests.
- .dexterity and coordination tests
- .career development counseling processes
- .utilizaiotn of commercial work sample systems
- .development of local work samples
- .design of informal assessment techniques for team members
- .situational assessment
- .interpretation and report writing

Such an interdisciplinary effort would help insure a broad understanding on the part of vocational evaluation specialists in schools. Vocational educators are concerned that rehabilitation evaluators, on the whole, may have little understanding of public school vocational education and special education programs and inadequate understanding of work involving data and things~~-as~~ opposed to "people skills." Graduate programs in vocational evaluation and CCWAVES appear to promote this as little emphasis in programs is placed on having technical trade skills while the verbal skills of counseling, writing, etc. are given heavy emphasis. This results in barriers between vocational evaluation specialists and vocational education teachers who may feel that evaluators simply do not know enough about real work to make recommendations for vocational training.

While university training is preferred for basic personnel development; in-service training should be available from university and other sources so that vocational evaluation specialists may continually update their skills. Such in-service should be interdisciplinary, as well, involving local vocational education, special education, and rehabilitation personnel.

In attempting interdisciplinary training, significant unfortunate barriers often exist. Special eduators, vocational educators, and rehabilitationists often operate in their own separate worlds. This is true also at a federal level. Federal agencies should require evidences of cooperation between special education, vocational education, and rehabilitation as one criteria for the evaluation of training grant proposals.

ASSESSMENT TEAM MEMBERS

Assessment team members include those who contribute to and those who use the results of vocational assessment. Team members may include:

.general education teachers (English, etc.)
.special education teachers
.work study coordinators
.vocational education teachers
.educational diagnostician /psychologist
.vocational and special education administrators
.occupational orientation teachers

These individuals may contribute information concerning a student via:

.checklists of vocationally relevant skills associated with a team member's area

.giving specific tests-interest, achievement, aptitude

.interviewing students and parents concerning vocational plans and interests

.administering work samples (eg. vocational teachers in their classrooms, etc.)

.providing career education experiences

In using the results of vocational assessment, team members must be able to: interpret reports; understand basic implications of assessment results; be able to develop a plan to help student's reach vocational goals.

Training for team members may be obtained via university courses in vocational evaluation. However, in-service training would appear very important here. Some information concerning vocational evaluation should be included in vocational-special needs courses and in secondary special education courses.

ROLE OF STATE DEPARTMENTS OF EDUCATION

Personnel in State Departments of Education in each state have a critical impact on personnel development related to vocational evaluation/assessment. To optinally facilitate personnel development and availability of vocational assessment services, State Departments of Education should:

1. Develop policies and guidlines regarding vocational assessment. For example, the Texas Education Agency has recently mandated that a vocational assessment be

available for all handicapped students. Such policies should:

.be developed cooperatively between vocational education, special education, rehabilitation, and mental health.

.state minimal vocational assessment procedures required for students with special needs-especially handicapped and disadvantaged

.develop program standards for vocational assessment

.identify certification and training standards for vocational evaluation specialists

.it is recommended that vocational education be primairly responsible for certification and program standards concerning vocational assessment. This will allow vocational assessment to more easily be used with all students while assuring priority to those with special needs.

2. Encourage personnel development (in-service or courses) by funding training in vocational evaluation/assessment. This should, preferably, provide joint training of vocational education, special education, and rehabilitation personnel.

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An Interest Inventory to Facilitate Student Participation in Career Decisions

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An Interest Inventory to Facilitate Student Participation in Career Decisions

Career development is viewed as a life-long process of decision making. In order to make good decisions, one must have adequate information and strategies at their disposal (Clarke, Gelatt & Levine, 1965). These processes appear to be of paramount concern for the special needs student, as educators cannot assume that these students possess the necessary tools for making such decisions. Inanacone and Hiltenbrand (1981) point out the need to prepare the student from an early age to participate in this process rather than something that happens to them. One way to help insure the student's participation to the fullest extent is through activities which provide both information and the opportunity to make decisions.

This process of decision making appears to be extremely important when taken in light of the various mandates of Public Law 94-142, the Education for All Handicapped Children Act, 1975. One mandate requires the student be placed in an appropriate, least restrictive environment. One such appropriate environment is vocational education. However, placement often depends upon decisions made for the student rather than by the student. The gap appears to be that many special needs students do not possess the knowledge and/or the tools to make such choices.

To facilite the appropriate placement of a special needs student, PL 94-142 further mandates that an Individual Education Plan (IEP) be written which includes student objectives based upon present assessed levels of performance. If the student lacks the necessary skills to make career decisions, his/her level of functioning in career development will be extremely difficult to assess.

In the State of Hawaii, career education assessment/decision making has relied heavily upon a cardsort and computersort method known as Career Kokua. Although these methods are adequate for many students, it was found that most special needs students were unable to successfully complete this process. Two main concerns have surfaced: (1) many students lack the reading skills necessary to complete Career Kokua and (2) the students have not learned to express their own feelings concerning the world of work. In an attempt to prepare special needs students to participate in the Career Kokua process an informal career awareness and interest inventory was developed.

Goals & Objectives of Program. The GW Work Interest Inventory is an informal assessment device intended to survey and identify a student's occupational task interests. This inventory is integrated into a curriculum which takes the student from an internal search, through various occupational clusters, specific job choices and strategies for training and employment.

The goals of the kit are (1) to develop an attitude of work that encompasses one's skills and capabilities, (2) to increase one's awareness and personal desires for various occupational clusters, and (3) to develop strategies to use local and regional job resources. Incorporated within these goals are the following objectives:

(a) Students will make a realistic appraisal of personal skills and capabilities.

(b) Students will be exposed to various occupational clusters and make personal evaluative decisions concerning these occupations.

(c) Students will choose certain occupational clusters of interest for themselves.

(d) Students will learn where to obtain information concerning jobs within their specific occupational clusters.

(e) Students will learn occupational orientation and entry-level job skill requirements.

Each unit and chapter is also accompanied by an objective. Objectives are descriptive of the purpose of each lesson and unit, and can then be expanded upon and written in behavioral terms.

The kit also meets the five objectives and three competencies of the State of Hawaii's Foundation Program: Career Education and Guidance. These objectives run the gamut from self-concept to pursuing career development as an integral part of the student's total growth and development. The competencies deal with the training, skill and background requirements of occupations in which the student is interested.

Conceptual Flow of the GW C.A. & I. Kit. The underlying theme of the kit is to establish a personal occupational file. One that would be used as a basis to initiate future occupational training and hands-on experiences in various occupational fields. This base is necessary in order to establish an effective and desired path for preparation for successful working careers.

The conceptual flow is established by having each student complete an individual occupational file which incorporates the various components of the Career Awareness and Interest Kit. The following items are found in the student's file and make up the direction of the Kit:

(1) A cover sheet giving the student's personal data and an

overview of Career Awareness and Interest search results. (Found in manual appendix.)

(2) A checklist of skills known, in the process of learning, and will learn. (Worksheet A).

(3) Work interest choices. (GW Interest Inventory)

(4) Profile results of chosen occupational clusters. (GW Interest Inventory Graph and Cover Sheet).

(5) Actual occupations of interest and related work data. (Copies of Worksheet D).

(6) Subjective feelings concerning occupational choices by the student. (Worksheet E).

(7) Skills needed to obtain desired occupations. (worksheet F).

The manual and the table of contents may be used as an overall guide in constructing a complete career awareness and interest unit to meet these phase requirements of the occupational file. Each chapter in turn represents a mini-unit which builds upon each other. The pace of study may be quickened or the contents expanded depending on the student's needs.

Components. Many handicapped students have difficulty processing information through the conventional means of career information. The predominate means begin the written form which then requires students to make particular inferences through minimal exposure to careers and themselves.

The handicapped student needs a sequentially organized instructional format that incorporates a number of learning modalities which focus upon career awareness and development.

With the GW Career Awareness and Interest Kit the manual is used as the structural unit which establishes the sequential direction of the search. The manual also incorporates a variety of activities in which to introduce, teach and evaluate the various topics of career awareness; from self evaluation of personal skills and capabilities, to deciphering collected career information concerning desired occupations. These activities incorporate a multi-sensory approach; visual, audio, spoken, and written forms.

In addition to the manual is an interest inventory. An interest inventory is ideal as it does not require the students to divulge personal information, the time requirement is minimal when compared with an aptitude test and does not require any expense for scoring.

The GW Interest Inventory is of a heterogeneous nature. A wide variety of activities are used to yield cluster occupational areas of interest. The purpose of this variety is to indicate to the student broad areas of interest that he/she would or would not like. From this base one may pursue actual occupations within a given area. For example, if the area of interest is clerical, the student may pursue the job of file clerk and examine the job requirements and related student abilities.

The majority of interest inventories employ the written mode for presenting interest choice and response. This singular mode presents a problem to many students who have problems understanding certain concepts due to poor vocabulary and limited exposure to certain occupational tasks.

Certain non-reading inventories do exist such as the GEIST and the Reading-Free Vocational Interest Inventory. However, when dealing with a mildly and moderately handicapped population such as secondary L.D. students; the line drawings are often not explicit. Problems have been found with stereotyping sex roles to specific occupations as well as difficulty deciphering occupational roles with a given line drawing.

To deal with these areas of difficulty, the GW Interest Inventory incorporates an audio-visual component which displays actual work tasks. This inventory has been piloted on a limited basis among high school students (9th-12th grade students in 6 high schools in the State of Hawaii), and to date the audio-visual component appears to be satisfying this need. If the student is having difficulty reading, he can follow along with the tape. If the student does not understand a concept he can view a visual portrayal of the task. This appears to eliminate many questions for the teacher and encourage more independence on the student's part. This also eliminates a great deal of bias on the part of the instructor. For example, with many written tests the instructor may be required to assist the student in reading various occupational choices. At this time the instructor may inadvertently allow his/her bias to show through via intonation or personal approach to the inventory question.

Deciphering of Career Information. After the student has obtained information about himself, his skills and capabilities, understands occupational clusters, and has begun to focus on decision making skills and chosen two or three specific occupational clusters of interest;

he/she is now ready to learn and evaluate specific jobs within his given clusters. The Career Awareness and Interest Kit attempts to meet the needs of providing students with the necessary information through the use of existing career information systems. It further facilitates decision making by providing strategies for the student.

In Hawaii, career information is gathered through the Career Kokua System or the Government Information System. Both systems can be used through a computer component or through a manual and Card sort method. The kit being designed for the State of Hawaii addresses these two systems for gathering information. However, the GW manual is designed in such a manner as to also facilitate other career information systems.

Gathering information appears to present no problem to the student using a hands-on search via a computer, card sort title search or an index manual search. The difficulty lies in deciphering all of the information gathered.

For many mildly and moderately handicapped students reading again becomes the primary problem. With the computer system most learn the basic commands to communicate with the computer via the terminal to obtain a career print-out. With the card system the student may arrive at occupational choices through his cluster choices and then numerically be referred to a source to secure detailed job information.

The GW manual provides a variety of outlines to elicit specific details concerning occupations pursued in a given cluster. These outlines transfer the printout/card-sort information onto a more "readable" format which becomes a reference sheet for future job training, shadowing, or even pursuit of employment.

The outlines ask the students to find, record and consider items such as wages, required tasks, training procedures, school courses, and the related questions. The outlines also require the student to take the information a step further; into the area of subjective feelings. Again the student begins to list and evaluate particular tasks within a specific job that has filtered out of his/her desired cluster. For example the student must list at least five tasks required in a given occupation and evaluate them in relation to his/her particular skills, capabilities, desire for further training and feelings. This feedback is presented and recorded in both a verbal and written form.

With the completed outlines the student will now begin to make decisions as to which specific occupations he/she would like to learn more about and develop future strategies to further this end. The student is also reminded that none of the decisions that he/she has made to date will be final decisions.

The Occupational File. The occupational file which was presented earlier in this article as the outline for the conceptual flow of the kit, would now be in a semi-completed form. It is at this point that the teacher can take the coversheet provided in the manual and condense the student's information and present it in an outline form. This would include the students list of personal skills, occupational clusters and specific job choices, as well as occupational skills and vocational training strategies.

The manual lists specific strategies to follow, in order to secure job training, hands-on experiences, mock interviews, application filing and developing a meaningful rationale as to how scholastic concepts learned may be applied to specific occupational pursuits. Lists are also made and included within the occupational file that provide methods in which students may secure hands-on experiences through occupational skills programs which include materials, tools, processes, and even the people involved in various occupations.

The underlying concept of the GW Interest Inventory is to provide career information (through a variety of modes) and strategies to facilitate good career decision making for handicapped students. Many special needs teachers are now aware of the need to begin providing these skills before high school. A program such as the one described appears to be appropriate for a variety of age ranges and handicapping conditions. Career information and decision making strategies must be implemented early to insure that special needs students will indeed play an integral part in their own realistic occupational decisions.

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CAREER/VOCATIONAL ASSESSMENT FOR THE BEHAVIORALLY IMPAIRED

Presented at the International Conference on
the Career Development of Handicapped Individuals

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Loews Anatole, Dallas, Texas

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The under-employment of the behaviorally impaired population and their failure to obtain meaningful, long-term employment can be traced in part to limited experiences in relevant programs offered by the community, employers or public schools. As a result of inadequate exposure to and preparation for life experiences, many behaviorally impaired adults have been placed in various institutional settings. The cost of such institutionalization, and the necessary concomitant financial aid is presently appropriated through tax revenue. The goal of a career/vocational program for the behaviorally impaired is to begin to reverse this situation of dependency by allowing these individuals to become tax payers instead of tax burdens and integrating these individuals into the mainstream of society as contributing members.

Mainstreaming for community living requires a multidimensional treatment approach which focuses on the provision for a program which is developmentally oriented and socially supportive. The impending lack of funds challenges existing programs to use diagnostic/prescriptive assessment procedures which will maximize educational, employment or community placement.

Evaluators are increasingly aware of the futility of administering tests which are neither normed nor standardized on the behaviorally impaired population. We are beginning to sense that the assessment procedure must be humanized, that labeling must be dropped, and that money wasted on most assessments could be better spent on service to a test weary client. For those reasons, I recommend two strategies: The Luria-Nebraska Neuropsychological Battery and Client Self-Inventory.

THE LURIA-NEBRASKA NEUROPSYCHOLOGICAL BATTERY

The Luria (Golden, Hammeke, Purisch, 1980) is a standardized quantified and structured exam that was developed to provide a systematic and comprehensive assessment of brain functioning. Luria believes that the brain is organized into areas, each of which has a specific function such as: arousal (brain stem), input from the outside world (temporal, parietal, and occipital), and planning, evaluation and motor output (frontal lobes). Any behavior, he believes, depends upon the concerted effort of all these areas. The pattern of intercooperation among different areas of the brain to produce a given behavior is called a functional system. Each behavior we perform has at least one functional system associated with it, and behaviors can be performed by more than one functional system, so each system is not necessarily unique. Each area of the brain is involved in numerous functional systems. The effect of a brain lesion is the disruption of every functional system which includes that area of the brain. There may not be an outward loss of the behavior because it can be picked up by an alternate functional system available to the patient. In other cases, a definite behavioral impairment will become obvious when there is no alternative system (Golden, 1981).

Luria utilized multiple items to identify areas of deficit. By varying tasks so that as few as possible links were changed, he was able to identify which step in a complex process (e.g. which cortical areas) were not functioning adequately (Wilkening, Golden , in press).

FIGURE 1 ABOUT HERE

Areas A.B.C, and D of Figure 1 represent areas of the brain. If the subject is unable to perform tasks 1 and 2 but can do task 3, one would suspect that area B of the brain is not functioning properly. On the other hand, if the subject misses tasks 2 and 3 but is able to do task 1, then one would suspect that area C is not functioning properly (since C is the area common to both 2 and 3 but not 1). Further testing would be undertaken to affirm or disaffirm these conclusions.

The Luria is comprised of eleven (11) clinical scales (Motor, Rhythm, Tactile, Visual, Receptive Speech, Expressive Speech, Writing, Reading, Arithmetic, Memory, Intellectual Processes), one pathognomonic scale and left and right hemisphere scales. Several research scales exist as well, including a localization scale and factor scales.

The Battery allows the diagnostician to:

1. Determine the existence of brain damage or dysfunction and whether it is functional or organic;
2. Assess its severity;
3. Provide a measure of the acuteness (recency) or chronicity of onset;
4. Provide a determination of the localization of the damage, if, in fact there is a focal

lesion of some kind from which other hypothesis or statements regarding the patient's behavior can be generated;

5. Develop a rehabilitation program based on the patients measured deficits or strengths.

Dr. Charles Golden (1981) states that the purpose of the rehabilitation program is to help the patient learn to form alternate functional systems for those systems which have been disrupted and not spontaneously replaced. This can be done in a variety of ways:

a) Employ another area of the brain to take over the function of the lost area;
b) Substitute a lost complex skill with a series of basic, simple operations;
c) Substitute a new complex skill for a lost brain skill; or
d) Find a completely new way to do the task that does not depend on a contribution from the injured area of the brain.

Any materials may be used in any combination as long as the task used aims at replacing the injured functional system in some rational manner. For example a test result which indicates that the client has difficulty with expressive and receptive speech will need a highly structural environment. Information will need to be given in brief, concrete conceptual units, strongly augmented by sources of visual and tactile stimulation.

Dr. Charles Golden at the University of Nebraska Medical Center, Nebraska Psychiatric Institute in Omaha, Nebraska, is directing the standardization of the Luria-Nebraska Neuropsychological Battery-Children's Revision. The Psychoeducational Assessment Center in the Educational Therapy Department at Nebraska Psychiatric Institute administers the Luria, other psychological exams, and assessment of educational, career/vocational, social/home/peer relationships, and behavior to provide a complete profile, or map, of a client's educational and psychological characteristics.

SELF-INVENTORY PROFILE

The results of these measurements are shared with clients who complete their own self-inventory profiles. The purposes of the profile are to:

1. Help individuals become more realistic in assessing the relationship between where they are and where they would like to be;
2. Maximize specific programmatic recommendations; and
3. Emphasize assets or orient clients towards remediation and/or habilitation.

FIGURE 2 ABOUT HERE

DIRECTING GOALS TOWARD POSITIVE AND CONSTRUCTIVE ACTION

After the client has answered the questions "Who am I and what do I do well?", he/she begins habilitation/rehabilitation by answering the questions "What's Out There For Me?" "How Do I Get Into That?" and "How Do I Succeed?" Personal involvement in goal setting characterizes a therapeutic milieu which contributes to the ego development of the behaviorally impaired.

Loevinger (1969) sees the ego as a useful way of thinking about human behavior. Ego is one of four kinds of all human development (psychosocial, intellectual and physical being the other three) but is assigned the name "master trait" because it synthesizes multiple factors of development and symbolizes the whole of the person.

Nathaniel Branden (1969) states that "the individual plays a profoundly important role in determining the course of his own psychological development and in the strengthening or destroying of his self-esteem". It is expressed as "I can" rather than "I have" and can be maintained only through constant growth, a premise of basic mental health. Self-esteem is the key to an individual's mind. We need only release an individuals motivation to learn, not find it or create it (Kozol, 1980).

One way to accomplish that is to use the Ranking System which identifies those educational needs most critical for each client based on the resources available.

FIGURE 3 ABOUT HERE

The Ranking System is completed conjointly by the evaluator and the client based on the results of the developmental history, formal tests, informal assessments, work sample, and interviews. For example, by using a scale of 1 to 5, with 1 being a great need and 5 being a low priority, one can determine at a glance the top two or three client needs by reading down the "Needs Column". The column with the most 1's constitutes the greatest need. If a client needs to learn Independent Living Skills (Need # 1) and the organization has the resources such as a model apartment (Criteria # 1), then put a 1 in the first box. If the client needs Reading Remediation (Need # 2), but the organization does not have the resources (Criteria # 1), then put a 5 in the second horizontal box and so on.

SUMMARY

Assessment of the behaviorally impaired client need not be a time-consuming process. First, the Luria-Nebraska Neuropsychological Battery takes only two hours to give and eliminates or confirms a suspicion of brain damage. Second, clients who are responsible for identifying their own goals make faster progress toward becoming a tax payer rather than a tax burden. It is the responsibility of each evaluator to provide the most efficacious environment in which to foster the mental maturity of this socially disenfranchised population.

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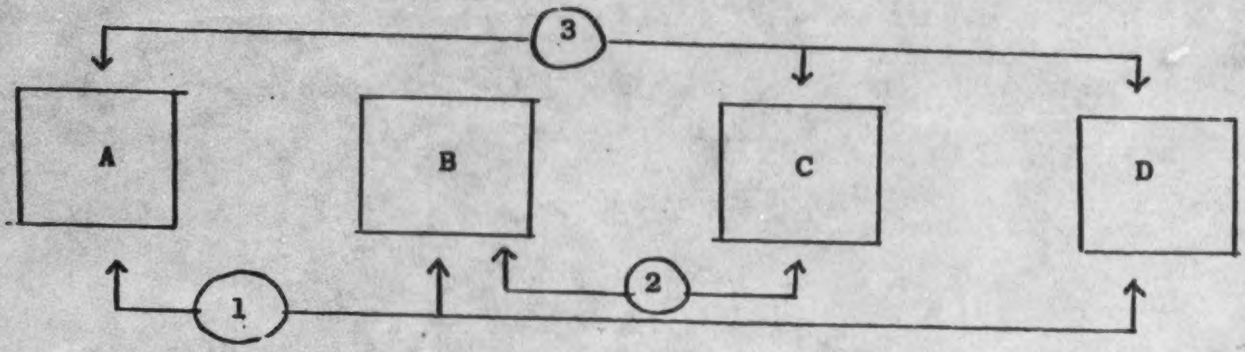
FIGURE 1

Luria-Nebraska



TASK 1 - - - A, B & D

TASK 2 - - - B & C

TASK 3 - - - A, C & D

FIGURE 2

NAME: ____________________

PERSONAL PROFILE:

DATE: ____________________

A. **INTERESTS:** List hobbies/leisure time activities/ extra-curricular activities:

1. ____________________
2. ____________________
3. ____________________
4. ____________________

List subjects you enjoy in school:

1. ____________________
2. ____________________
3. ____________________

List interests identified in Interest Inventories:

1. ____________________
2. ____________________
3. ____________________
4. ____________________

B. **APTITUDES/ABILITIES/SKILLS:** List work skills you have learned from school or work or volunteer experiences:

1. ____________________
2. ____________________
3. ____________________

CHECK ABILITIES WHICH YOU HAVE:

____ 1. Verbal ability (ability to use words and ideas expressed in words)
____ 2. Numerical ability (ability to use numbers and ideas expressed in quantities)
____ 3. Physical coordination/dexterity (ability to make precise movements)

PERSONAL PROFILE (PAGE 2)

_____ 4. Social Ability (ability to relate well with others)
_____ 5. Creativity (ability to develop or produce something new)
_____ 6. Organizational ability (ability to bring together different elements to accomplish goals)
_____ 7. Spatial relations/visual perception.
_____ 8. Other abilities, describe below:

____

____

C. ACHIEVEMENT (percentiles) :

WRAT: ____________ PIAT: ____________ OTHERS: ____________

D. CHECK YOUR INTEREST IN WORKING WITH:

DATA: HIGH _____ LOW _____
PEOPLE: HIGH _____ LOW _____
THINGS: HIGH _____ LOW _____

FIGURE 3

RANKING SYSTEM

	Needs									
Criteria	1	2	3	4	5	6	7	8	9	10
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										

Criteria

1. Resources
2. Committment to Change (organization)
3. Committment to Change (client)
4. Time
5. Tradition
6. Immediate Results
7. Magnitude of Discrepancy
8. Number of People Affected
9. Contribution to Goals
10. Learning Capacity of Client

Needs

1. Independent Living Skills
2. Reading Ability
3. Consumer Economics
4. Legal Rights
5. Health
6. Interpersonal Relationships
7. Personal Orientation
8. Occupational Knowledge
9. Prevocational Skills
10. Community Resources

CAREER ASSESSMENT/DEVELOPMENT PROJECT:

A Comprehensive Approach to Career And Vocational Programming for the Handicapped Learner

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The need to provide appropriate career and vocational education and training programs for handicapped individuals has been clearly recognized and supported by Federal legislative mandates and guidelines. The Vocational Rehabilitation Act of 1973 (PL 95-113 sec. 504), The Education of All Children Act of 1975 (PL 94-142), and the Vocational Education Ammendments of 1976 (PL 94-482) have called for the development, expansion and strengthening of vocational programs as a priority need for the handicapped during the past decade.

In response to Federal mandates, service providers in Special Education, Vocational Education, Vocational Rehabilitation and other State agencies have identified numerous problems and issues in the evaluation, development and implementation of career education and vocational services for handicapped individuals.

A major problem/concern in providing appropriate vocational programs stems from the wide range of the needs and abilities of the handicapped and the inadequate or limited availability of comprehensive programs or cooperative-interagency planning to meet those needs. "A variety of vocational delivery options should be available so that individual learners can successfully develop their vocational potential to the maximum." (Sarkees & Gill, 1981).

If service providers are to be successful in their efforts to meet the diverse vocational needs of the handicapped learner, they need to develop comprehensive programs and cooperative inter/intra agency plans that will increase the availability of programmatic options for the handicapped.

State level leadership personnel from the fields of Vocational Education, Special Education and Vocational Rehabilitation have identified service delivery and program options and interagency cooperation ~~are~~ As major problem areas in providing vocational programs to handicapped students. (Leadership Training Institute, University of Illinois, April, 1980).

The Federal mandates have provided the responsibility and challenge for providing appropriate career and vocational education for the handicapped. These complex demands will require a clear understanding of vocational options available to handicapped students and the cooperative efforts of special educators, vocational educators and vocational rehabilitators to implent them.

This article presents a program description of the Gengras Center for Exceptional Children, an on-campus laboratory school for Saint Joseph College, involved in the preparation of teachers for the handicapped. The focus of the article is on the Center's Career Assessment and Development Project. The Project demonstrates a comprehensive approach and multi-option model for developing career and vocational programs for special needs learners.

The Project addresses issues and problems concerning the availability of alternative vocational program options and delivery of services within the least restrictive environment, and the need for cooperative inter/intra program planning.

GENGRAS CENTER PROGRAM OVERVIEW:

The Gengras Center is a state approved private special education facility providing a highly structured/behaviorally oriented program for special needs lea learners identified as mildly/moderately retarded, learning and language disabled, behavioral disordered and physically handicapped. The Center provides services for seventy students between the ages of 9 and 21 years old. The Center serves approximately thirty school districts in Central Connecticut.

In addition to providing direct special education services/resources to children and school districts, the Center functions as a laboratory/training facility for Saint Joseph College students majoring in Special Education, and Child/Human Services, as well as students from other Connecticut colleges and universities.

The Center is comprised of an adolescent unit (ages 14-21) and an intermediate unit (ages 8-13). The program design provides for a departmentalized approach within the units facilitating: a) the individualization of instruction; b) teacher effectiveness in planning/instruction and; c) approximation and generalization of learned behavior within different situations.

The mission of the Center's program is to provide for individualized assessment, planning-implementation of academic and career/vocational instruction coupled with behavioral/social and emotional support.

The learners Individualized Educational Plan reflects both the needs of the learner and the intent of the program and specialized instruction to meet the student's needs.

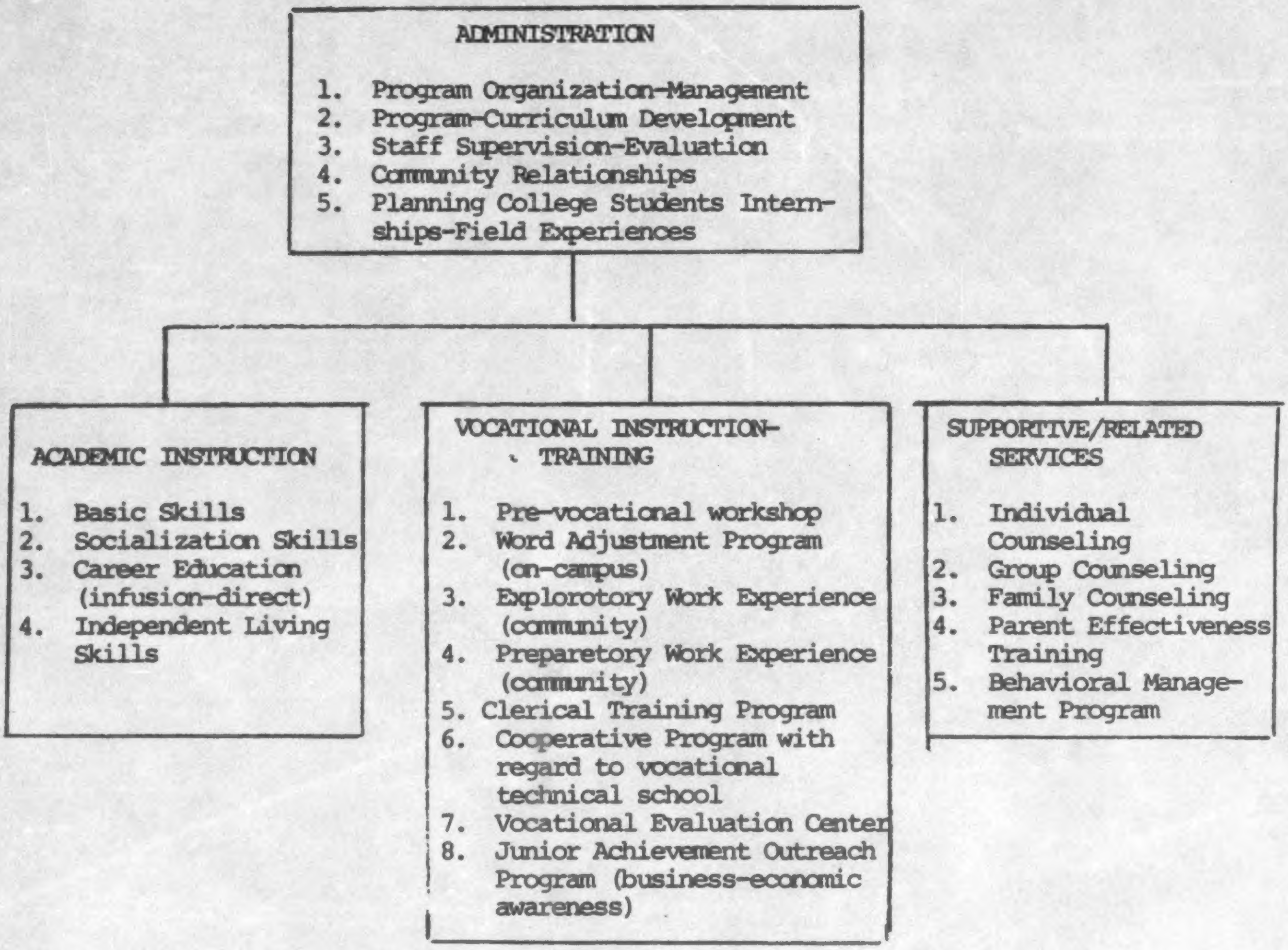
The program provides for a multi-faceted curriculum and services comprised of the following: a) diagnostic and prescriptive instruction; b) behavioral, social and emotional development; c) academic skill development; d) career and vocational evaluation and skill development; e) supportive services (psychological assessment and counseling (individual, group, family), social services, vocational counseling, speech and language therapy, adaptive physical education, occupational and physical therapy); f) recreational programs and; g) parent and family programs.

The interdisciplinary Team is the core of the program and is responsible for the interfacing, coordination, needs assessment, planning-implementation-evaluation and modification of the above program components, and the development and monitoring of the learners Individualized Educational Plan.

In summary, the instructional methodology and programmatic intervention of the Gengras Center focuses on a developmental progression, and a competency-based problem-solving approach to learning which can be applied to meet the learner's needs and those of his/her community.

PROGRAM DESIGN/COMPONENTS:

Figure 1 presents the organizational structure and major roles of the four components within the Gengras Center.


ADMINISTRATION
1. Program Organization-Management
2. Program-Curriculum Development
3. Staff Supervision-Evaluation
4. Community Relationships
5. Planning College Students Internships-Field Experiences
ACADEMIC INSTRUCTION
1. Basic Skills
2. Socialization Skills
3. Career Education (infusion-direct)
4. Independent Living Skills
VOCATIONAL INSTRUCTION-TRAINING
1. Pre-vocational workshop
2. Word Adjustment Program (on-campus)
3. Explorotory Work Experience (community)
4. Preparetory Work Experience (community)
5. Clerical Training Program
6. Cooperative Program with regard to vocational technical school
7. Vocational Evaluation Center
8. Junior Achievement Outreach Program (business-economic awareness)
SUPPORTIVE/RELATED SERVICES
1. Individual Counseling
2. Group Counseling
3. Family Counseling
4. Parent Effectiveness Training
5. Behavioral Management Program

CAREER ASSESSMENT/DEVELOPMENT PROJECT:

The Career Assessment and Development Project is a comprehensive multi-option model for planning career education and vocational training programs for handicapped learners. The Project provides a variety of service delivery options within the concept of a least restrictive environment.

The need for a full spectrum of vocational training options to meet the wide range of special educational needs which vary greatly in intensity and duration has been recognized and articulated by both special and vocational educators.

A cascade of vocational delivery options is presented in the administrative manual on programming for handicapped students at the secondary level responding to public laws, (Regional Resource Center's National Topical Conference, 1977). The delivery options were also recognized in a State of the Art report on Vocational Education of Handicapped Youth, (National Association of State Boards of Education, 1979).

Figure 2 presents the vocational program options and various levels of vocational program components and the description/criteria of each component within the cascade. (Please refer to Figure 2 on page 6)

Move only as far as necessary (more restrictive)

Return as soon as possible (less restrictive)

Level VI

Work Activity Center

A program designed to provide an array of work experiences which ultimately result in economic opportunity for impaired persons whose handicaps are so severe that their work productivity depends on a highly structured, contained work environment.

Level V

Temporary Vocational Training Program

A thorough program provided in a work-evaluation, teaching, clinical setting. The objective of placement in a temporary vocational training program is to evaluate and/or improve a handicapped person's work awareness, skills and attitudes. The person remains a maximum of six months; at the end of this time, he or she may be placed into any of the other training programs in the continuum.

Level IV

Individual Vocational Training

Offered on an individual basis to the handicapped, this program matches a specific training program to the person's exhibited vocational interests and/or needs. Specific programs such as apprenticeships, manpower development, training placement, or identified training stations are used to train the student in a particular job. It includes individual vocational training that is community-based or in a school vocational or industrial arts class.

Level III

Special Vocational Education (self-contained)

This program is designed solely for students placed in special education classes. It is designed for handicapped persons whose disability precludes integration into a regular vocational education program.

Level II

Adapted Vocational Education

Regular vocational education programs which are altered to accommodate handicapped students via the provision of special materials, equipment, and personnel. Special education students eligible for this program are usually those participating in resource room programs.

Level I

Regular Vocational Education

Developed and designed for all students in the regular continuum of secondary education. Handicapped students and/or students receiving support services (i.e., speech, counseling, social work, therapy) may be placed in this program if it is determined that they can benefit from its offerings.

The program components of the Career Assessment and Development Project provide a parallel to the cascade of vocational education programs presented in Figure 2. The program components increase the availability of vocational delivery services and provides individualization of instruction to meet the diverse needs of individual learners. A description of the Project's program options and levels follows.

LEVEL I

COOPERATIVE VOCATIONAL PROGRAM

A cooperative mainstream program offers vocational trade exploration and preparation for special needs learners within a regional vocational/technical school on a half-time basis (students attend shops on an every-other-week basis). A special education liaison provides resource supportive services within the vocational trade shops and direct related academic instruction at the Gengras Center. Transition to full-time placement at the vocational/technical school is based on student performance in the part-time program. Students who attend full-time are provided special education resource assistance and review of IEP is monitored on an intermittent and annual basis by the liaison teacher.

LEVEL II

COOPERATIVE WORK EXPERIENCE PROGRAM

A vocational training program developed in cooperation with selected employers in the community to provide a paid training/experience significantly contributes to the preparation and development of a student's vocational skills. There are three components of the program: 1) required academic instruction; 2) related vocational instruction and; 3) on-the-job training (OJT) experience. The program is planned and supervised by the Center's Vocational Counselor and employers so that each contributes to the student's education and his employability.

LEVEL III

EXPLORATORY INTERNSHIP PROGRAM

A career-vocational non paid community work experience program was designed to provide occupational/career exploration. The students are involved in hands-on activities and work shadowing experiences. The Vocational Counselor evaluates the student's performance as a basis for career counseling concerning the student's interest, aptitude and work ability.

LEVEL IV

WORK ADJUSTMENT PROGRAM

Work adjustment sites on the campus of Saint Joseph College provide a situational/observational assessment of a student/trainee's work adjustment behaviors and related work skills. The trainee is exposed to the types of job task and jobs expectations that are characteristic of occupations relating to clerical, grounds/building maintenance, housekeeping, food service and child care. The focus of training on these sites is on developing positive work adjustment behaviors and attitudes that may be generalized to any given occupation or career. Students earn an hourly rate and are supervised by the Vocational Counselor.

LEVEL V

PRE-VOCATIONAL UNIT

The unit provides simulated work activities and industrial arts projects to develop work/social problem-solving skills, work adjustment behaviors and positive work attitudes. Students receive instruction from a vocational instructor who has certification in Special Education.

JUNIOR ACHIEVEMENT OUTREACH PROGRAM

A pilot program for economic/business awareness sponsored by the national organization of Junior Achievement in which students develop basic hand tool skills, social problem-solving skills and awareness of business operations and economics was formed. Through the development of a mini company students become involved in production and marketing of products. The program is implemented cooperatively by special education staff and advisors from area businesses.

CLERICAL TRAINING PROGRAM

This program provides specific vocational training in general office skills. The student receives training in typing, reprographics, filing and mailing, bookkeeping, utilization of word processors and micro-computer terminal and receptionist duties. Based on student performance, students are placed on campus clerical work sites and then to community exploratory and preparetory work experience. The clerical training is provided by a certified occupational instructor.

LEVEL VI

VOCATIONAL EVALUATION CENTER

The vocational evaluation program provides for a comprehensive systematic/continuous process for assessing the learner's vocational abilities, aptitudes and as he progresses through the various stages of vocational training and preparation. Individualized assessment plans are developed for each student. The vocational evaluation data is collected through: work samples, student interviews, situational/observational, interest/aptitude testing, job analysis, performance/simulated work activities.

CAREER EDUCATION CLASSES

Career Education instruction is incorporated into all levels of the continuum of vocational programs in the Career Assessment and Development Project. The Project views career development as a life-long process that involves awareness, exploration, preparation, planning and decision-making. The career evaluation program provides instruction in self-awareness, occupational information, independent living skills, employability skill training and socialization skills. The instructional approach to providing career education has been a compilation of direct programming with infusion of concepts in other areas of instruction. The focus is on direct instruction providing courses on career education. Special education teachers provide instruction.

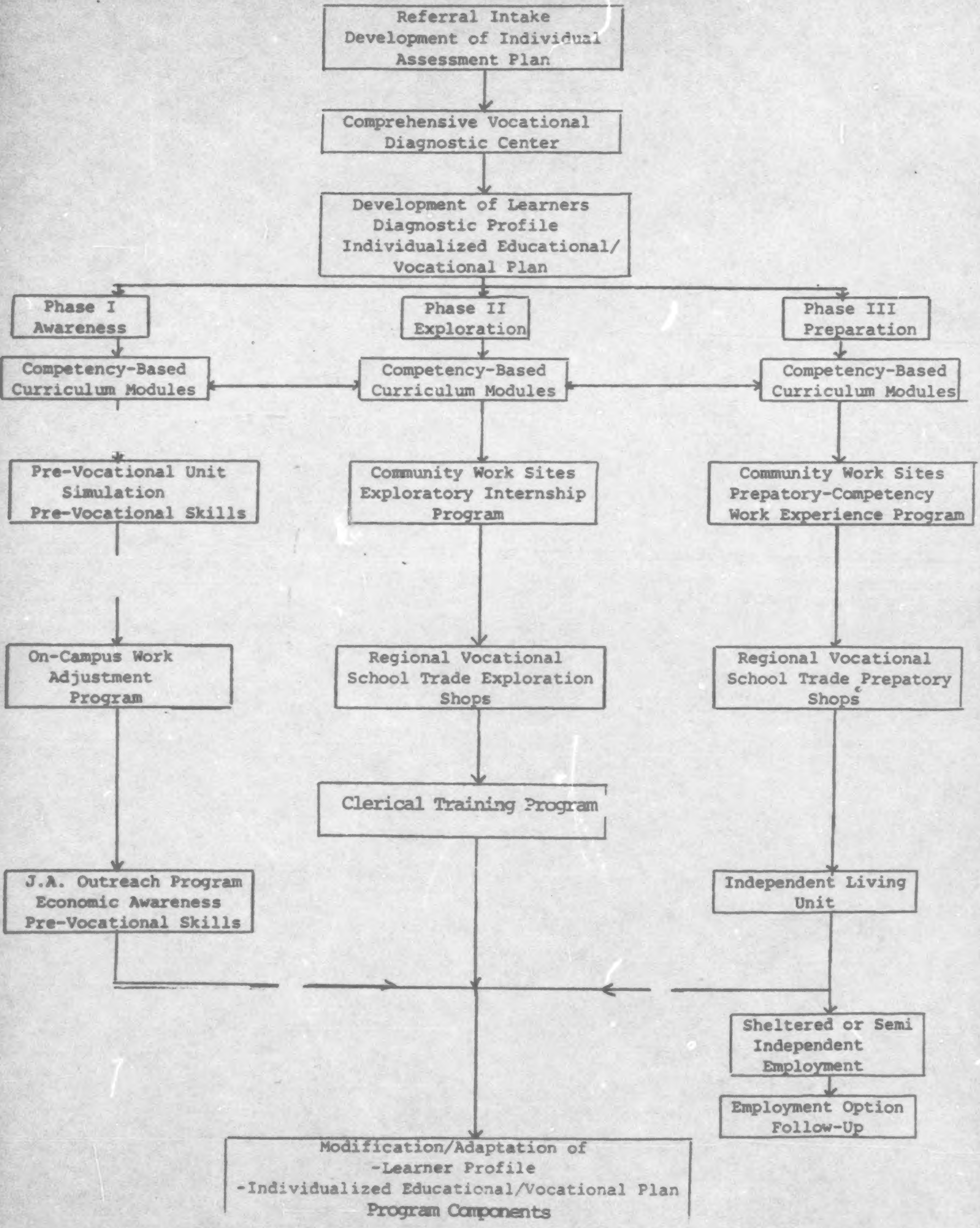
PROGRAM DESIGN:

The Project's organizational design for career and vocational education training represents a developmental progression of career development (awareness-exploration-preparation and placement.)

Significant in the process is the vocational evaluation component which identifies the present level of performance and entry level skill for each student. The evaluation provides a basis of development of the learner's Individualized Educational/Vocational Plan. The Plan specifies the level(s) and program options pertinent to each learner's career/vocational needs.

Students are evaluated at each level and/or program. Student's performance on evaluations have a direct impact on the development and modification of IEP's. Figure 4 presents the organizational design of the Career Assessment and Development Project.

GENGRAS CENTER ORGANIZATIONAL DESIGN PROCESS


Referral Intake
Development of Individual
Assessment Plan
Comprehensive Vocational
Diagnostic Center
Development of Learners
Diagnostic Profile
Individualized Educational/
Vocational Plan
Phase I
Awareness
Phase II
Exploration
Phase III
Preparation
Competency-Based
Curriculum Modules
Competency-Based
Curriculum Modules
Competency-Based
Curriculum Modules
Pre-Vocational Unit
Simulation
Pre-Vocational Skills
Community Work Sites
Exploratory Internship
Program
Community Work Sites
Prepatory-Competency
Work Experience Program
On-Campus Work
Adjustment
Program
Regional Vocational
School Trade Exploration
Shops
Regional Vocational
School Trade Prepatory
Shops
Clerical Training Program
J.A. Outreach Program
Economic Awareness
Pre-Vocational Skills
Independent Living
Unit
Sheltered or Semi
Independent
Employment
Employment Option
Follow-Up
Modification/Adaptation of
-Learner Profile
-Individualized Educational/Vocational Plan
Program Components

CONCLUSION:

The challenge to develop and improve the quality of career and vocational education programs for handicapped individuals is a complex and difficult goal to achieve.

Factors which effect programming relate to the diverse needs of the handicapped, availability of program options, implications of the principal of least restrictive environment and interagency coordination of services. These and other factors require a comprehensive approach to program development and planning.

This article suggests that the development of alternative vocational program options within a least restrictive cascade of services and cooperative efforts of direct service providers will have an ~~effectuous~~ effective impact on meeting the needs of society and the individual needs of the handicapped toward self-sufficiency and non-dependence.

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Developmental Career Assessment:
A Model for Public Schools

by

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DEVELOPMENTAL CAREER ASSESSMENT:
A MODEL FOR PUBLIC SCHOOLS

by

Michael Peterson

In recent years, simultaneous emphasis has been placed on career education and vocational education of handicapped students. Brolin (1978), Clark (1977), and others have built upon the national career education movement initiated by Marland in 1971 by developing "life-centered" career education curricula. Other professionals (Phelps and Lutz, 1971; Tindall, 1976; Dahl, et al, 1978) have been involved in encouraging vocational education of handicapped persons. As these programs have been increasingly emphasized, assessment of student skills related to vocational development and development of functional living skills has been seen as needed. Such "career assessment" is needed to help develop appropriate individualized career and vocational education programs for handicapped students. This short paper will describe a conceptual model for career assessment in secondary schools.

Vocational Evaluation in Rehabilitation

In the last fifteen years, the field of vocational evaluation has developed in rehabilitation to provide assessment services for disabled persons. Nadolsky (1973) has described the model used in rehabilitation in which a client is involved in interviews, counseling, psychological tests, occupational exploration, work samples, situational assessment, job tryouts, and vocational counseling. Vocational evaluation in rehabilitation most often has the following characteristics:

- range of three days to four weeks long
- implemented in a separate evaluation center that is often associated

a sheltered workshop

- staffed by a vocational evaluator
- focus on evaluation of adults for job placement
- use of commercial work sample systems augmented by some local work samples, psychological tests, and situational assessment to measure aptitudes and specific work abilities
- short-term, one-shot service. Little is known of most clients prior to evaluation; vocational evaluation is seen as preceding other services.
- focus on vocational development with little emphasis on functional living skills

Career Assessment in Schools

Introduction

While the model described above has served the needs of rehabilitation, schools have needs to build upon and modify this model. This is true for the following reasons:

- schools deal with handicapped students over several years on a developmental basis
- schools must be concerned with the development of both functional living skills and vocational skills
- assessment of these skills must begin in elementary school to facilitate skill development

"Career assessment" in schools should be set up as a comprehensive system to monitor and facilitate the career development of handicapped students. What then is meant by "career development"? Career development, is used here in the context in which Brolin (1978) speaks of "life-centered career educations" as the development of skills to enable a student to function in three major life environments; (1) work; (2) home; and (3) the community.

Dawis and Lofquist (1968) described a theory of work adjustment in which the needs of the individual must correspond with reinforcers available in the environment, and the skills of the individual must correspond to the requirements of the environment if satisfactory adjustment is to be made. In each of the major environments -- work, home, and community -- student values, interests, needs, and skills are important in promoting adjustment in an individual's life. Consequently, to promote successful career development of handicapped students we must simultaneously:

- help students explore and expand their own values and interests
- develop skills
- select jobs and lifestyles congruent with student needs and skills.

To do this requires a consistent, systematic, developmental monitoring of student values, interests, needs, and skills as they relate to work, home, and community -- thus the need for a model of "developmental career assessment."

Model characteristics

Recent projects and literature (Stodden, 1980; Peterson and Hill, 1981; Sittington, 1979; Clark, 1977) have suggested various revisions of the rehabilitation-based vocational evaluation model for use in public schools. A model of Career Assessment, partially described in a recent publication by Peterson and Hill (1981), is presented below. This model has the following characteristics:

- developmental perspective on skills, interests, and values
- divergent (career exploration) and convergent (career selection)
- practical interaction with and imput on instruction
- student centered-focus on learning, growth, and exploration on the part of the student

- team input by parents, various educators, and others
- longitudinal input--collection of data concerning developmental patterns
- coordination by a trained Career Assessment Specialist
- maximum use of existing school resources--vocational classrooms, etc.
- utilization of effective career assessment methods
- focus on whole person--home and community as well as vocational
- at least yearly monitoring of student development

Career Assessment Planning

In public schoos, assessment and student development often occurs simultaneously. This is illustrated via the form in Figure 1. An occupational orientation class, for instance, is an excellent setting in which students values and interests may be simultaneously developed and assessed. Likewise, student functional living skills are simultaneously developed and assessed in a homemaking class.

Insert Figure 1 about here

Assessment of important student skills, however, must not be left to chance. Each year the interdisciplinary team must develop an Individualied Education Plan (IEP) based on assessment information from the previous year. This is illustrated in the figure below.

Instruction/ Assessment   IEP Planning

Each year an individualized career assessment plan should be developed for a student. The IEP committee should plan an individualized program and identify assessment questions and techniques to answer each question. The form in Figure 2 provides a mechanism for the committee to document a career assessment plan.

Insert Figure 2 about here

To effectively plan career assessment, the IEP committee must have a clear understanding of; (1) functional living skills that must be developed for independent and semi-independent living; (2) entry level criteria for vocational training and jobs; and (3) various informal and formal methods of assessment. If numbers 1 and 2 are understood, proper assessment questions may be asked; then methods may be planned to answer questions. While this information is readily available, many educators are not familiar with it. Thus, in-service training is vitally important for IEP team members and all who are participating in the career assessment process.

Assessment Skills and Abilities

Several resources provide a comprehensive listing of functional living skills in a format conducive to both programming and assessment. These include:

- Brolin's (1978) Life-Centered Career Education
- Independent Living Skills Checklist
- Camelot Behavior Skills Checklist

The Dictionary of Occupational Titles provides a listing of jobs, job tasks, and aptitudes. Project VESEP (1976) developed a systematic analysis of developmental student skills associated with various vocational training programs. These general "pre-vocational enabling skills" are listed in Figure 3. Additionally, a training analysis may be conducted locally to determine entry-level criteria for vocational programs (Peterson and Hill, 1981), and a job analysis may be conducted concerning skills needed in jobs.

A form for training analysis is illustrated in Figure 4.

Insert Figure 3 about here

Certain key career assessment questions will be more critical at certain times in a student's school program. The development of functional living skills grows more important as the student comes closer to graduation. According to the career education model, students should move through phases of awareness, orientation, exploration, and preparation. Thus, questions concerning vocational interests, values, and exploration are important in grade 8. In grade 9 or 10 questions concerning student skills and interests as they relate to specific vocational programs become most important; at grade 12 questions concerning job placement are critical.

Insert Figure 4 about here

Methods of Career Assessment

Some career assessment techniques may be considered more informal in which student's are assessed as part of instruction; more formal methods include tests, work samples, etc., that may be given in special education or vocational classrooms or, even more formally, in a separate vocational evaluation center. To the degree possible, existing school resources should be used to implement career assessment. However, a career assessment center may be very useful as a way of certralizing resources and emphasizing career assessment experiences. Key methods are described briefly below. Some methods such as work samples, have been more associated with assessment of vocational skills. However, modified versions of these methods may be useful with assessment of functional living skills as well.

Special education tests. Social, psychological, medical, and other assessments must be performed. Valuable career and vocational information may be acquired through analysis of this information.

Interviews with students and parents may provide valuable information concerning functional living skills, family support, and student values, interests, and skills. Vocational teachers may interview students who tour their program.

As part of instruction. Each educator and professional that interacts with a student can provide valuable relevant information. This is especially implemented through the use of checklists of teacher observed behaviors. Each teaching area should be analyzed to determine vocationally relevant skills and checklists developed for use by teachers. Stodden (1980) has implemented important work in this process. Additionally, skills in the Project VESEP checklist may be associated with particular programs. Marge Patton (1981) has identified potential contributions of various school staff also.

Tests are also useful. Vocational development tests may include: vocational interests; career awareness; vocational aptitude: Tests concerning functional living skills include checklists and specific tests such as: Social and Prevocational Information Battery (SPIB); Brigance Inventory of Essential Skills--Secondary; Street Survival Skills Questionnaire; Everyday Skills Test, etc. These may be given as part of regular special education assessment, by teachers, by counselors, or in a special vocational evaluation center.

Work samples are samples of work which can simultaneously be used for occupational exploration and "hands-on" assessment of abilities. Work samples can be administered by vocational teachers in classrooms or by career assessment specialists in assessment centers. While most used for vocational skills, work samples may be developed to assess student functional living or independent living skills. For instance, a "laundry work sample" can assess a students ability to do laundry.

Situation assessment. Students may "tryout" environments to see how they function in them. Vocational classroom tryouts will help students and teachers decide about vocational placements; job tryouts, about job placements. Additionally, students could "tryout" home and community environments through special activities, use of half-way houses, etc.

Personnel

As indicated above, career assessment must be a team process in which a variety of educators provide input concerning a student. This process must be coordinated and monitored by a trained career assessment specialist. Such an individual may work full-time or part-time in this function depending upon the size of the school district. The career assessment specialist and educational diagnostician should work closely together so that career assessment and educational assessment are combined as a total assessment process for handicapped students.

Team members will include those who contribute information to the assessment process and those who use assessment results. Contributing members and potential methods used include:

1. special education teachers--tests; interviews; skill checklists
2. psychologists--psychological tests; interviews
3. counselors--vocational aptitude and interest tests; interviews
4. vocational teachers--interviews; work samples; classroom try-outs
5. general education teachers--skill checklists
6. physical education teachers--physical skill shecklists
7. career assessment specialists--all methods

Summary

Career assessment involves systematic, logitudinal assessment of the development of student interest, values, needs, and skills as they relate to work, home, and community environments. Such assessment is vital in facilitating student adjustment and in developing appropriate individualized career and vocational education programs. Assessment is individualized yearly by the IEP committee and implemented by a team coordinated by a trained career assessment specialists who use effective methods of career assessment.

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FIGURE 1

CONCEPTUAL CAREER ASSESSMENT PROCESS

VOCATIONAL DEVELOPMENT (JOBS)					
		GRADE 7	GRADE 8	GRADE 9	GRADE 10
CHOICE (VALUES, INTERESTS, NEEDS)	DEVELOPMENT				
	ASSESSMENT				
SKILLS (REQUIREMENTS OF THE ENVIRONMENT)	DEVELOPMENT				
	ASSESSMENT				

SAME PROCESS FOR: COMMUNITY: HOME

FIGURE 2

VOCATIONAL ASSESSMENT PLAN

QUESTION	METHOD	STAFF	DATE	RESULTS

FIGURE 3

INDIVIDUAL VOCATIONAL EVALUATION PLAN

EVALUEE: ______________ DATE: ______________ EVALUATOR: ______________

*	QUESTIONS	*	METHODS	DATE	PERSONS INVOLVED	PLAN MODIFICATION	RESULTS
	Should John enter auto mechanics?						
	Is he interested?		WRIOT Interest Test		Special ed teacher		Mech interest high
			Interview		Counselor		Stated interest OK
			Tour of shop w/ teacher		Teacher		Tchr and he liked each other
	Physical abilities OK?				Special ed test info		OK
	Reading and math abilities?				Special ed test info		Maybe some problems in reading text - spec ed tutoring nd
	Ability to do mechanical		Classroom tryout		Teacher (voc'l)		
	work/work behaviors		Checklist from teachers		Special ed teacher		
	How does he learn best?		Checklist from teachers		Special ed teacher		

FIGURE 4

TRAINING ANALYSIS FORM

Vocational Program: Auto Mechanics

Instructor: Bill Wrench School:

Date: 8/80

Occupational training goal(s) of program: Entry-level mechanics in general garage; can also train mechanics helpers in single skills.

Entrance criteria.

1. Physical skills: What minimal physical skills and abilities are required? What modifications could be made?

	Skill		Modification
x	Walking:	Lots of awkward	
x	Standing:	positions.	
x	Lifting:		
x	Carrying:		
x	Bending:		
	Fine-motor:		
	Speech:		
	Other:		
	Other:		

2. Educational skills: What minimal academic skills are required? What modifications could be made in teaching techniques to allow lower skill levels? (+ - ÷ x) read guages

Math:	9th grade book: measuring skills important	On job 4-6th grade level may be OK - especially mech. helper
Reading:	10th text	On job 4-6th level OK.-Mech. helper
Language:	Communicate w/ tchr. Follow verbal instruction.	

3. Vocational skills:

Basic tool use and knowledge required: (Which ones?) Minimum: Identify basic hand tools & use. Helpful: understand basic parts and workings of a gasoline motor.

Safety rules (specify): Understand dangers of electricity and avoiding moving parts; adequate physical control; able to learn and follow safety rules.

TRAINING ANALYSIS FORM, cont'd.

Work behaviors. Which ones are most critical? Not violent; interested and motivated; concentration on task; not horse around; NOTE: if these are problems, behavioral contract may be made with student.

Other concerns?

Learning abilities.

Teaching techniques used. Which teaching techniques do you use? How could you modify these for the needs of a specific student?

	Technique	Modification
x	lecture:	
x	audio-visual:	Deaf; use written script; spec ed tutor w/script
x	small gp. project: can repair as brought in	"Buddy system"
	discussion:	
	demonstration:	
x	study text:	
	grade level: 8th-10th grade	Spec ed teacher tutor/Voc AV materials individually
	ind. projects:	
	other:	

Most all students proceed at the same pace? [✓ Yes] No Suggested modifications? Tutoring; buddy system; individualized study plan (example - let student specialize on 'brake jobs', etc.)

What support services or materials would you need to help handicapped students succeed in your program? AV individualized materials; support from special ed teachers; parental involvement

Other comments?

Person doing anaylsis: Bill Wrench, Teacher
Tom Talk, Vocational Counselor

On the Level: Vocational Assessment of the Handicapped in Texas

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Running Head: On the Level

Abstract

Comprehensive vocational evaluation models were adapted from rehabilitation and community agency models for use in vocational assessment of the handicapped in the public schools. Some school systems developed vocational evaluation center models while others were unable to progress due to either a lack of funds or a lack of knowledge in the field. The state education agency developed guidelines to make vocational evaluation a more well-defined process, as well as more economically feasible. The guidelines continued to include the option to allow school systems to provide a comprehensive vocational evaluation for handicapped students.

On the Level: Vocational Assessment of the Handicapped in Texas

Methods of vocational evaluation began to develop as the efforts of the public schools to meet the guidelines of Public Law 94-142 and other related legislation. While the impact of these laws were being felt across the United States, the late 1970's saw very few vocational evaluation programs in the public schools (Quinones, 1978a). By the end of 1980 the Texas Education Agency developed guidelines for the vocational evaluation of handicapped students (1980). These guidelines called for three levels of vocational evaluation ranging from vocational screenings to comprehensive evaluations. Thus the impact of the need for models of vocational evaluation became a very critical issue. The models to be discussed should assist the reader in pursuing his/her own answers to current frequently asked questions: "What tests do I give?," "Do you have a list of tests?," and "What are the components of a useful vocational evaluation?"

The Vocational Evaluation Center

The concept of the vocational evaluation center can be viewed as a kind of 'Origin of the Species.' Rehabilitation studies centers such as those at the University of Wisconsin-Stout and at North Texas State University are good examples.

The vocational evaluation centers at these universities offer a variety of vocational tests, commercially developed work samples, locally developed work samples, and observational rating systems for use by their vocational evaluators. Public school personnel assigned the responsibility of vocational evaluation tend to choose assessment tools traditionally used by the evaluation center where the tool had its origin, the rehabilitation model.

Some large urban school districts may have situations which are conducive to the establishment of a comprehensive vocational evaluation center, modeled after the more traditional models from rehabilitation and community agencies for the handicapped. Factors which may be necessary for the establishment of such a center include a special education population large enough to justify funding from various sources, school busing routes which can be utilized, and a central location such as a magnet school site.

A comprehensive vocational evaluation is vital for an in-depth examination of a student's vocational strengths and weaknesses. This evaluation assists the referring staff, such as the home school vocational admission, review, and dismissal committee, in planning the most appropriate vocational placement for that student.

Vocational Evaluation in a Large Urban School District

The responsibility of an education designed to prepare students for employment or continuing education is extremely important when preparing handicapped students to enter the world of work. This challenge is shared by general, vocational, and special education. An integral component of the student's educational plan has to be an apprppriate and accurate vocational assessment. The Texas Education Agency defines vocational assessment in the following manner:

> A vocational assessment provides information that is essential in planning appropriate vocational training for handicapped students. Assessment includes the collection of information concerning astudent's interests and abilities (Texas Education Agency, 1980, p. 2).

Vocational assessment, in order to comply with both the letter and the spirit of the current legislation for special education, should be conceptualized as an on-going process tailored to the individual student's needs. Following is a description of a model for the delivery of vocational assessment services in a large urban school district in the north Texas area.

Vocational assessment of handicapped may be thought of as occuring along a continuum of formality of assessment. Informal vocationally oriented observations would represent

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one end of the continuum and the formal vocational evaluation employing work evaluation systems would represent the other extreme of the continuum. A student's assessment would begin at the more informal end of the continuum and proceed to the point where enough data is generated to make an appropriate decision about the student's vocational placement. Lower level assessments would not exclude a student from vocational training but rather indicate 1) instant acceptance into a regular vocational program or 2) suggest the need for a more intensive evaluation, with the understanding that at all times ultimate placement decisions are made by the appropriate admission, review and dismissal committee.

In concurrence with the state education agency's three levels of assessment the local education agency model was developed. These levels appear to be generally defined by the nature of the vocational training program the student is being considered for as well as the formality of the actual assessment. Each level of assessment would share a common core of information with each successive level contributing additional information about the student.

In the proposed model the various levels of assessment are operationally defined as follows:

Level I. The minimum Level I vocational assessment for

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handicapped students consists of five kinds of data:

1. Special Education data
2. Informal interview with student
3. Informal interview with student's parents
4. Information from the teacher currently providing the majority of the student's instruction
5. Cumulative records.

Level II. The minimum information required for a Level II vocational assessment consists of two kinds of data, according to the state guidlines: a vocational interest inventory and a vocational aptitude test. The interest inventory for Level II is the California Occupational Preference System--Intermediate Level for readers and the AAMD-Becker Picture Vocational Interest Inventory for non-readers. The aptitude test is the Purdue Pegboard.

Level I and Level II data is collected by classroom based teachers. This data is collected during the eighth grade year prior to an annual end of the year review by the Admission, Review, and Dismissal (ARD) Committee.

Level III. The Level III vocational assessment is more comprehensive than the previous two levels. This level consists of additional evaluation instruments and work samples. This evaluation is individually administered and takes approximately two and a half hours for the brief assessment to two weeks for the extended assessment, depending upon the nature of the referral question and the complexity of the case. The Level III assessment is based upon the ARD Committee's ability to use the data from Levels I and II. A Level III vocational assessment would be primarily for the following:

1. Those students being considered for a Work Activity Center
2. Those students being considered for a Vocational Adjustment Class, or special education work study program
4. Any student for whom it is felt needs a more intensive vocational assessment in order to be mainstreamed at the local campus level.

The shorter Level III assessment consists of the following tests:

1. Wide Range Interest--Opinion Test
2. Bennett Hand-Tool Dexterity Test
3. Crawford Small Parts Dexterity Test
4. Pensylvania Bi-Manual Dexterity Test
5. Street Survival Skills Questionnaire.

The AAMD-Becker Vocational Picture Interest Inventory may be substituted for non-readers. The extended, or comprehensive, Level III evaluation may include these tests and work samples as well as other instruments. The decision for selecting either the brief Level III assessment or the comprehensive Level III assessment is made by a special Vocational Assessment Review Committee.

Level III vocational assessments are consucted by specially trained vocational counselors attached to the district's Work Activity Centers for the short assessment and by vocational counselors and special education staff attached to the district's Vocational Evaluation Center for the comprehensive assessment.

Vocational Evaluation in a Small Urban School District

Vocational assessment in a small urban school district may also be thought of as occuring along a continuum of evaluation, ranging from informal to formal. A student's assessment begins as the more informal end of the continuum and proceeds to the point where enough data is generated to make appropriate decisions about the student's vocational placement.

State education guidelines allow each school district to have flexibility in determining the most appropriate vocational assessment to be used. State education agency policy requires that each handicapped student be assessed vocationally before placement in regular vocational education. However, levels of assessment are determined by the local education agency.

The following is the rationale for vocational assessment of the handicapped in a small suburban school district in the north Texas area:

1. To recommend either special or regular pre-vocational training, life skills training, or appropriate job placement
2. To indicate appropriate vocational information within the special education curriculum
3. To fulfill state education agency policy requiring vocational evaluation of handicapped students before entering regular programs
4. To provide the handicapped student information concerning the positive vocational strengths he/she possesses or those which can be developed.

These tasks are accomplished through a similar informal to formal continuum mentioned by the larger urban school district guidelines.

Level I. The Level I assessment is accomplished during the seventh grade through information found in the student's cumulative records. The liaison classroom teacher is responsible for the compilation of this information. Level I consists of the following types of information: test data, student and parent interviews, instructional data, and cumulative record data.

Level II. The Level II assessment begins in the eighth grade and continues through the ninth grade. This data will be used to assist in making appropriate ninth grade vocational decisions and planning for the four year graduation plan, which is also required by the state education agency. Level II will consist of a vocational interest inventory, such as *CASE*, and a vocational aptitude test such as the *Purdue Pegboard*. All eighth grade students will have these two assessments. The ninth grade students will have additional test batteries dependent upon the severity of disability. For students below a 4.4 grade reading level and/or mental retardation the *Valpar 17 Pre-vocational Readiness Battery* will be administered. The *Brigance Vocational Scales* will be administered to students with a 4.5 grade reading level or higher and/or a learning disability or disabilities.

Level I and Level II information will be completed and compiled into the Basic Vocational Assessment Report (BVAR). The vocational assessment specialist will be responsible for this report and will assist in making recommendations to the Vocational ARD Committee for future vocational placement of the student.

Level III. Should the BVAR not provide enough information for the student's placement, a Level III assessment will be given. At this point the vocational assessment specialist will be responsible for administering additional assessment tools as well as compiling a comprehensive vocational assessment report.

Classroom based vocational assessment for Level I and Level II are advantageous for the following reasons:

1. There are no transportation costs when assessments are done on site.
2. Information gained is of utmost interest and concern to the classroom teacher in individual student planning.
3. Vocational assessment information is used as a curriculum tool.

Specific assessment questions should be developed as the student progresses through the secondary curriculum. The identification of specific questions is a crucial part of vocational assessment. Vocational assessment should assist in finding answers to these questions. At some level of assessment answers to the following questions should be found:

1. Do students meet identified entrance criteria in a specific vocational program?
2. Do students possess sufficient skills for regular vocational education?
3. Do students have job seeking skills for job placement?
4. Do students have functional living skills?

Answering, or attempting to answer, these questions should assist in the development of a positive interactive relationship between vocational assessment and instruction.

Summary

Theoretical models for vocational evaluation systems are available in the literature, such as the model cited in Brolin (1976). This paper has attempted to demonstrate models which are currently being implemented. As outlined in these models, an appropriate vocational screening or evaluation can be administered at various levels of testing. In fact, the various levels allow for a more individualized vocational evaluation plan rather than predetermining, for instance, a comprehensive assessment for a high functioning student who merely needs a screening to be admitted to a mainstream vocational program. Furthermore, assessment batteries of various length are cited in the literature which point to the potential usefulness of these for both vocational screening and vocational planning (Alcorn & Nicholson, 1975; Kane & Gill, 1972; and Quinones, 1978b).

In Texas the person who performs the vocational evaluation in the public school does not appear to be as large an issue as defining the requirements of a vocational evaluator. Brolin (1976) emphasizes the need for vocational counseling throughout the assessment process. The models in this paper include vocational evaluators with backgrounds in counseling, psychology, special education, educational diagnostics, and work adjustment programming, as well as vocational counseling.

By carefully examining a student's vocational interests, work skills, and aptitudes both the large and small urban school districts' vocational screenings, brief assessments, and comprehensive assessments can serve as an integral part of the individual educational planning process to provide comprehensive educational and vocational programming for special education students.

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Employment of a Behaviorally-Based Vocational Assessment Model With Exceptional Individuals

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Abstract: Theoretical and empirical research on vocational development processes has established the need for utilizing a behaviorally-based vocational assessment model with special needs populations. Critical vocational indicators which delineate trainees' potential for adjusting to the world of work are presented. A developmental model, entitled the Florida International Diagnostic-Prescriptive Vocational Competency Profile, is discussed which facilitates students' individualized growth through vocationally-related programming. Selected items from the instrument's six domains are presented which depict their behavioral specificity and utility for developing individualized educational/vocational plans. Coefficients representing the technical characteristics of concurrent validity and inter-rater reliability are included for educable and trainable mentally regarded, specific learning disabled, seriously emotionally disturbed and economically disadvantaged trainees at the secondary and post-secondary levels.

Effective preparation of special needs trainees for employment has been highly correlated with work attitudes and worker personality characteristics. Positive attitudes toward work have been identified as integral components of the work evaluation, work adjustment and vocational training processes which lead to successful employment (Alfano, 1973; Brewer, Miller & Ray, 1975; Ehrle, 1970; Kemp & Vash, 1971; Krantz, 1971; McClure, 1972; McFarlane, 1972; Murphy, 1972; Prep Research Reports, 1976).

Ehrle (1970) recommended that development of work tolerance, work habits, positive attitudes toward employment, and learning how to present oneself as a worker be included as experiences in structured vocational development programs. Eleven similar critical vocational behaviors and nine critical employment-coupled behaviors were identified by Krantz (1971) as necessary elements of vocationally-related work adjustment programs. Specific attitudinal areas identified by Murphy (1972) included responsibility, pride in one's work, being well groomed, honesty, and quality of one's work. More than 1000 separate behaviors related to employability were identified and systematically content analyzed into 36 job seeking and job keeping categories in another study(Prep Research Reports, 1976). Some of the critical attitudinal constructs identified in this study included courtesy, persistance, integrity, reaction to mistakes, dependability, responsibility, reaction to supervision, cooperation, reaction to co-workers, social judgement, leadership, initiative, and adaptability.

The positive effect of job readiness and employability skills training on individuals involved in vocational development programs has been improved ability to obtain and maintain jobs (Azrin, Flores, & Kaplan, 1975; Brandzel, 1963; Kemp & Vash, 1971; McClure, 1972; Way & Lipton, 1973). Enhanced positive attitudes toward work (Brewer, Miller and Ray, 1975; Currie, 1974; Tesolowski & Halpin, 1978) and improved worker personality characteristics (Tesolowski & Halpin, 1979) have resulted from work adjustment related programs. In addition, increased job satisfaction has been positively correlated with vocational adjustment (Rosenberg, 1979).

Rational for a Behavioral Assessment Model

Advantages of a comprehensive behavioral assessment system formulated upon observed trainee performance include its dynamic quality to facilitate the identification and examination of problem behaviors; determination of appropriate intervention techniques; evaluation of overall program effectiveness; and development of realistic individualized educational plans or vocational prescriptions (Matkin & Rice, 1979).

Behavioral assessment techniques have been successfully implemented in vocational rehabilitation service delivery systems such as work adjustment and work activity programs (Wehman, Schultz, Renzaglia, & Karan, 1977), vocational evaluation programs (Revell & Wehman, 1978) and sheltered workshops (Matkin & Rice, 1979; Zohn & Bornstein, 1980). However, there is an explicit need for using behavioral assessment procedures in educational service delivery systems. Wasik and Loven (1980) clearly charged school systems with the responsibility for adopting a common behavioral assessment model at the district level.

A Behaviorally-Based Vocational Assessment Model

The Florida International Diagnostic-Prescriptive Vocational Competency Profile (FIDPVCP)* was specifically developed to focus on behavioral assessment of work requirements as they relate to the functional levels of vocational competency demonstrated by trainees with special needs. Critical behaviors included on the instrument are vocationally relevant in that they essentially determine whether or not trainees will be able to obtain and maintain entry level employment. Furthermore, these vocational behaviors are relevant in that they realistically reflect requirements within a majority of work environments on the continuum of sheltered to competitive employment, as well as vocational training programs at the secondary and post-secondary levels. Behaviorally-based items assist in the specific identification of actions demonstrated by trainees rather than focussing on theoretical constructs.

The Profile was designed to evaluate individuals' general functional level and six specific domains of vocational competency. Results derived from the instrument facilitate the development of individualized educational plans (IEP's) which meet vocational needs of handicapped and disadvantaged trainees within secondary and post-secondary programs. Actual performance or or observed behaviors demonstrated within the training environment are the nucleus of this instrument. Items on the FIDPVCP are structured around basic attitudinal elements of the work personality as well as cognitive and motor skills considered necessary for successful performance within general work environments.

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*The Florida International Diagnostic-Prescriptive Vocational Competency Profile is a behaviorally-based assessment instrument which was published in 1980 by the Stoelting Company, 1350 S. Kostner Avenue, Chicago, Illinois 60623.

The Profile consists of 70 items which are distributed within six domains: (One item from each domain is presented in Table 1.)

I.	Vocational Self-Help Skills	(14 items)
II.	Social-Emotional Adjustment	(14 items)
III.	Work Attitudes-Responsibility	(7 items)
IV.	Cognitive-Learning Ability	(14 items)
V.	Perceptual-Motor Skills	(12 items)
VI.	General Work Habits	(9 items)

Each domain individually assesses a single component of the construct referred to as vocational competency. The meaning of this construct has been established through the actual items which are included in the Profile's six domains.

Each item contains five behaviorally-based statements which represent varying developmental levels of vocational competency. Professionals serving as evaluators or raters in secondary and post-secondary programs, similar to those previously identified, are instructed to score each item at only one level ranging from 5 to 1. Total scores for the six domains and the composite are then computed and percentage equivalents are extracted from the conversion tables. The equivalents are then plotted on a graph in order to delineate

Insert Table 1 about here

a quantifiable profile of the trainee's strengths and weaknesses. After the profile has been plotted it is used in conjunction with ratings on separate items and specific narrative comments which were recorded on the basis of the evaluator's observations to formulate an individualized vocational prescription.

Specific uses of the FIDPVCP include:

1. Selecting individuals for appropriate training programs.
2. Determining individual's present functional level of of vocational competency.
3. Determining and monitoring individuals' growth and development of vocational competency over a given period of time within a training program (individual and program evaluation).
4. Determining differential effects of training programs on a variety of trainees' worker personality characteristics.
5. Determining individuals' vocational strengths and limitations for planning an individualized vocational prescription (IVP).
6. Determining individuals' job readiness for placement into a competitive work environment.
7. Researching differential effects of various training strategies on different handicapped populations for future program development.
8. Supplementing the work sample approach to vocational evaluation.

Establishing Technical Characteristics of the FIDPVCP

The purpose of the standardization study was to establish inter-rater reliability and concurrent validity for the Florida

International Diagnostic-Prescriptive Vocational Competency Profile. One hundred trainees were included in the sample. Fifty trainees were secondary students and fifty trainees were clients enrolled in post-secondary rehabilitation facilities. All trainees met eligibility for specified handicapping conditions or economically disadvantaged criteria as established by Local Education Agency Exceptional Student Education, Division of Vocational Rehabilitation or Comprehensive Employment and Training Act programs.

Methods and Procedures

Selection of the Sample

Trainees included in the standardization study were receiving vocational training services through educational or rehabilitation settings. A common goal of every program was the eventual positive benefit outcome of sheltered or competitive employment. Program coordinators at participating agencies randomly selected groups of 10 trainees within special education classes, vocational education classes, work evaluation units, work adjustment units, sheltered workshops and work activity centers.

Five groups of ten trainees were identified at the secondary level and five groups were selected at the post-secondary level. The categorical populations included in this sample were educable and trainable mentally retarded, specific learning disabled, seriously emotionally disturbed and economically disadvantaged.

Description of the Standardization Sample

Demographic data describing trainees in the standardization sample is presented in Table 2. Variables including chronological age, sex, race, and the number of months in the present training program are presented.

Insert Table 2 about here

Inter-Rater Reliability

Ten groups consisting of ten trainees each were established to represent the educable mentally retarded, trainable mentally retarded, specific learning disabled, seriously emotionally disturbed, and economically disadvantaged at the secondary and post-secondary levels. Each of these 10 groups was assigned two evaluators who independently rated the 10 trainees on the Profile.

Grand total or composite scores were then calculated by totaling the numerical responses of 1 to 5 across each of the 70 items on the FIDPVCP. This procedure resulted in two scores, ranging from a minimum of 70 to a maximum of 350 points, for each of the 100 trainees.

Then the two independent sets of scores for each group of 10 trainees, obtained from each paired-set of evaluators, were analyzed by applying the Pearson product-moment formula. This procedure, resulted in 10 correlation coefficients which represented the degree of relationship between the grand total or composite scores for each paired-set of evaluators.

Concurrent Validity

The ten previously described groups were utilized in this phase of the standardization study. Each of the groups was assigned two evaluators who independently rank ordered the trainees within their assigned group. These rankings were based on each evaluator's judgement of the overall vocational competency which they attributed to each trainee. A rating of 10 was assigned to the trainee in each group who possessed the greatest degree of vocational competency. While a rating of one was assigned to the trainee in each group who possessed the least vocational competency. The greatest degree of vocational competency was defined to indicate the trainee with the most potential for success in the competitive labor market.

Each evaluator independently rated the 10 trainees in their assigned group on the FIDPVCP. Grand total or composite scores were calculated by totaling the numerical responses of 1 to 5 across each of the 70 items on the Profile. This procedure resulted in two scores, ranging from a minimum of 70 to a maximum of 350 points, for each of the 100 trainees.

Composite scores resulting from this procedure were rank ordered from highest to lowest within each group. These listings of scores were respectively assigned numerical ratings from 10 to 1. Normal rank ordering procedures were utilized in any cases of ties.

The combination of these procedures resulted in 20 independent paired-sets of ratings. The level of vocational competency of the 10 trainees in each group was rank ordered from 10 (highest) to 1 (lowest) on the basis of each individual evaluator's judgement and the composite scores of the FIDPVCP.

Finally, concurrent validity, representing the relationship between each individual evaluator's judgement of vocational competency and the composite scores resulting from their ratings on the Profile was established by applying the Spearman rank order formula to the ratings. This procedure resulted in two Spearman rho correlation coefficients for each of the 10 groups.

Results and Conclusions

Data presented and analyzed in this standardization study established the technical characteristics of inter-rater reliability (Table 3) and concurrent validity (Table 4). Coefficients were calculated for five populations at the secondary and post-secondary levels.

Inter-Rater Reliability

Summarization of the Pearson product-moment procedure is shown in Table 3. Results indicated that the inter-rater reliability coefficients for all 10 groups ranged from .7388 to .9008. These coefficients clearly support a relatively high degree of consistency among the 10 paired-sets of independent raters.

Insert Table 3 about here

Conclusions reached from the analysis of data and presentation of findings documented the position that individual items reflected a high degree of behavioral specificity. This quality enhances the value of the Profile as an assessment instrument, which can be used to make reliable observations of critical vocational behaviors.

Concurrent Validity

Concurrent validity coefficients were computed for five populations at the secondary and post-secondary levels. Summarized results, listed in Table 4, were derived by applying the Spearman (rho) rank order correlation procedure to the data. Analyses resulted in concurrent validity coefficients for the 20 independent evaluators across the 10 groups. These coefficients

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Insert Table 4 about here

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ranged from .7576 to .9636.

Conclusions resulting from the data analysis indicated a relatively high level of agreement among the 20 independent evaluator's judgemental rankings of the trainees' degree of vocational competency and the objective scores on the FIDPVCP.

Data analyses conducted in this standardization study have demonstrated that the Profile possesses the technical characteristics of inter-rater reliability and concurrent validity. The instrument's utility was established for evaluating the level of vocational competency demonstrated by handicapped and disadvantaged trainees within secondary and post-secondary training programs.

Summary

Vocational training programs at secondary and post-secondary levels are currently including work behaviors in the content of their curriculums in work adjustment, employability skills and job readiness on a more consistent basis. The Florida International Diagnostic-Prescriptive Vocational Competency Profile evolved from the need to provide trainees with effective individualized programming in this realm of instruction.

Subsequently, the Profile is used to gather vocationally relevant behavioral data on trainees and to formulate individualized educational/vocational prescriptions which are based upon observed strengths and weaknesses. Utilization of this developmental assessment/instruction model enhances the ability of professionals to modify and monitor individuals' growth and development in vocational competency.

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Table 1

Selected Items from the Six Domains of the Florida International Diagnostic-Prescriptive Vocational Competency Profile (FIDPVCP)

Domain I - Vocational Self-Help Skills

Item 1: Attendance

(5) In any randomly selected 4 week period, the trainee has no absences

(4) In any randomly selected 4 week period, the trainee has one absence

(3) In any randomly selected 4 week period, the trainee has two absences

(2) In any randomly selected 4 week period, the trainee has three absences

(1) In any randomly selected 4 week period, the trainee has more than three absences

Domain II - Social Emotional Adjustment

Item 6: Distractability

(5) Constantly tends to tasks for one randomly selected work hour

(4) Stops tending to tasks for no more than 4 minutes during one randomly selected work hour

(3) Stops tending to tasks for 5 to 10 minutes during one randomly selected work hour

(2) Stops tending to tasks for 11 to 15 minutes during one randomly selected work hour

(1) Stops tending to tasks for more than 15 minutes during one randomly selected work hour

Table 1 (continued)

Domain III - Work Attitudes-Responsibility

Item 2: Initiative - Requesting Materials

(5) The trainee obtains own materials or requests materials from supervisor more than 90% of the time

(4) The trainee obtains own materials or requests materials from supervisor between 70-89% of the time

(3) The trainee obtains own materials or requests materials from supervisor between 60-69% of the time

(2) The trainee obtains own materials or requests materials from supervisor between 50-59% of the time

(1) The trainee obtains own materials or requests materials from supervisor less than 49% of the time

Domain IV - Cognitive - Learning Ability

Item 1: Ability to follow Verbal Instructions

The trainee is able to follow unfamiliar verbal instructions

(5) That have at least six or more sequential steps

(4) That have three to five sequential steps

(3) That have two sequential steps

(2) That have one step

(1) Unable to follow unfamiliar verbal instructions

Table 1 (continued)

Domain V - Perceptual - Motor Skills

Item 2: Finger Dexterity (Tasks involving fine finger movements in activities such as clipping, knotting, chaining, assemblying, etc.)

The trainee:

(5) Performs tasks at competitive production rate with 100% accuracy

(4) Performs tasks at more than 75% of the production rate with 100% accuracy

(3) Performs tasks at 50-74% of the production rate with 1-3 errors per hour

(2) Performs tasks at 25-49% of the production rate with 1-3 errors per hour

(1) Performs tasks at less than 25% of the production rate with more than 3 errors per hour

Domain VI - General Work Habits

Item 4: Correcting Errors

When errors are made or work materials are ruined, the trainee:

(5) Spontaneously corrects errors and uses new materials more than 90% of the time

(4) Corrects errors or uses new materials 75-89% of the time

(3) Corrects errors or uses new materials 50-74% of the time

(2) Corrects errors or uses new materials 25-49% of the time

(1) Corrects errors or uses new materials less than 25% of the time

Table 2

Demographic Data Describing Trainee Populations at the Secondary and Post-Secondary Levels

Secondary Level Trainees

Populations	Chronological Age in Years and Months (Range) (Mean)	Sex (Categorical Percentages) Female	Male	Race (Categorical Percentages) Black	Hispanic	White	Number of Months in Program (Range) (Mean)
Economically Disadvantaged	15-4 to 17-7 16-6	40%	60%	30%	20%	50%	1 to 9 3.5
Educable Mentally Retarded	14-2 to 20-1 16-7	60%	40%	20%	20%	60%	1 to 12 4.4
Trainable Mentally Retarded	13-3 to 19-8 15-8	60%	40%	10%	20%	70%	1 to 12 4.2
Seriously Emotionally Disturbed	14-10 to 17-6 15-11	50%	50%	30%	20%	50%	1 to 12 4.3
Specific Learning Disabled	13-7 to 16-7 15-4	60%	40%	20%	30%	50%	1 to 8 4.3

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Table 2 (continued)

Post-Secondary Level Trainees

Populations	Chronological Age in Years and Months (Range) (Mean)	Sex (Categorical Percentages)		Race (Categorical Percentages)			Number of Months in Program (Range) (Mean)
		Female	Male	Black	Hispanic	White	
Economically Disadvantaged	22-10 to 64-7 40-1	50%	50%	20%	20%	60%	4 - 9 11.3
Educable Mentally Retarded	20-0 to 38-9 26-5	40%	60%	20%	20%	60%	4 - 40 16.3
Trainable Mentally Retarded	20-8 to 54-6 31-3	40%	60%	60%	10%	30%	4 - 48 21.5
Seriously Emotionally Disturbed	19-8 to 50-0 33-4	40%	60%	20%	20%	60%	1 - 30 7.4
Specific Learning Disabled	23-1 to 53-8 35-9	60%	40%	20%	10%	70%	7 - 40 21.9

Table 3

Inter-rater Reliability Coefficients Represented by Pearson Product-Moment Correlations on the FIDPVCP

	Secondary	Post-Secondary
Economically Disadvantaged	.8458	.8479
Educable Mentally Retarded	.8049	.7750
Trainable Mentally Retarded	.9008	.8364
Seriously Emotionally Disturbed	.7388	.8297
Specific Learning Disabled	.7858	.8468

Table 4

Concurrent Validity Represented by Spearman Rho Correlation Coefficients on the FIDPVCP

	Secondary		Post-Secondary	
Economically Disadvantaged	.8545	.7939	.7788	.9515
Educable Mentally Retarded	.7939	.9636	.8545	.8909
Trainable Mentally Retarded	.8636	.8667	.8333	.7576
Seriously Emotionally Disturbed	.7848	.8788	.8545	.9394
Specific Learning Disabled	.9273	.9273	.7818	.7576